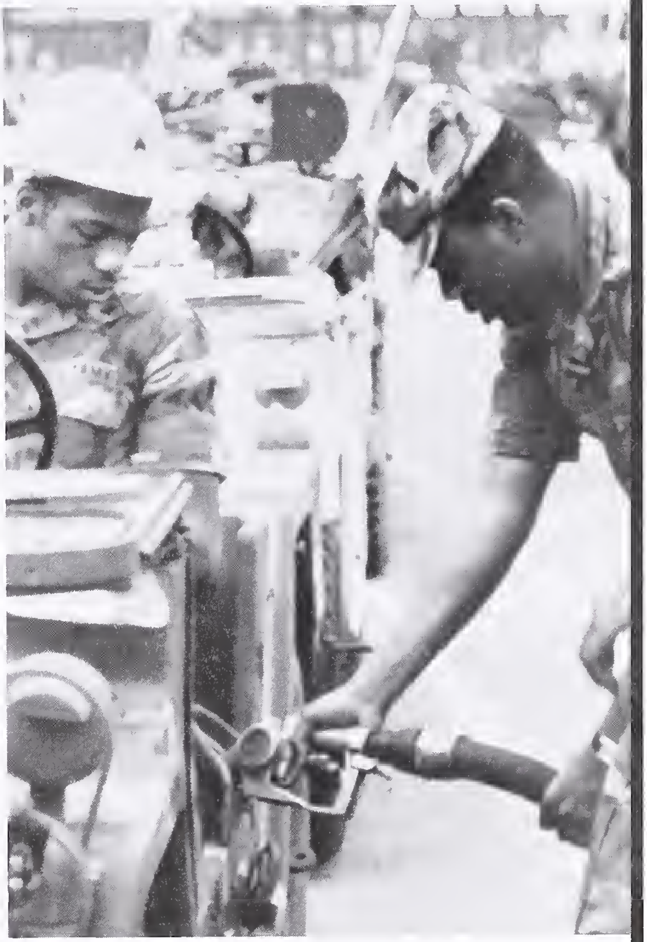
D 7.24: 986/4

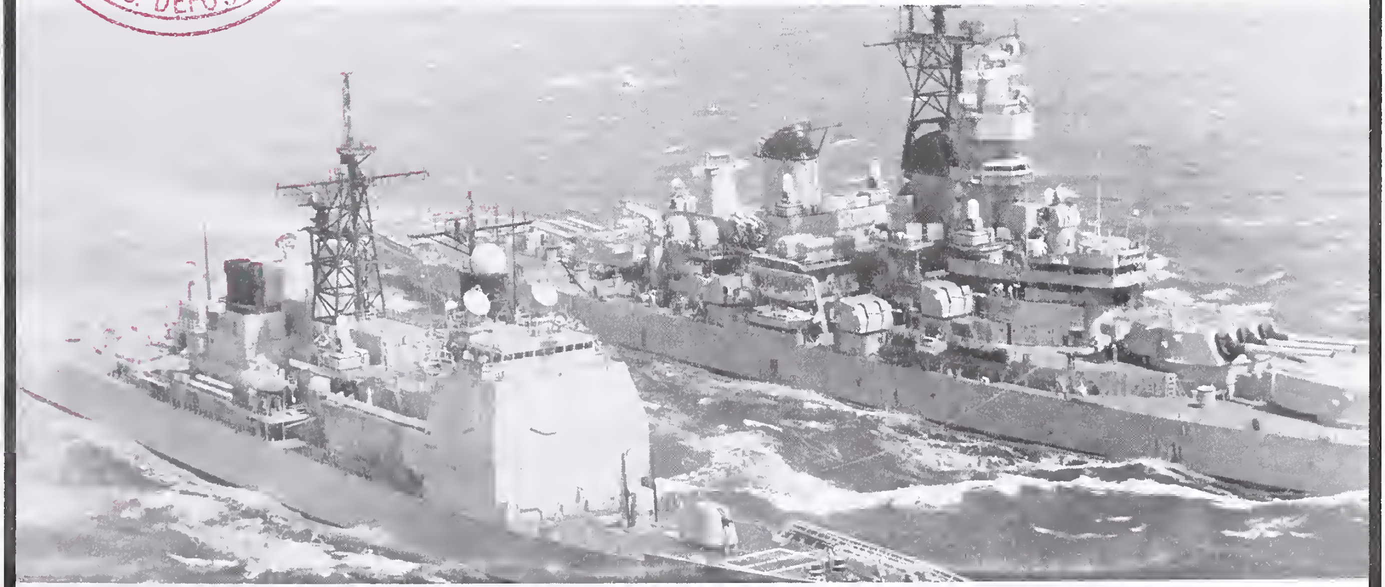
SPECIAL SUPPORT EDITION

FUEL LINE

DEFENSE FUEL SUPPLY CENTER ALEXANDRIA, VIRGINIA AUTUMN 1986



UNIV. OF FLA. LIB. * DOCUMENTS DEPT.
DEC 12 1986
U.S. DEPOSITORY



FUEL LINE

SPECIAL SUPPORT EDITION

DEFENSE FUEL SUPPLY CENTER

FUEL LINE is an official publication prepared quarterly by and for the Defense Fuel Supply Center and fuel-oriented clientele. *FUEL LINE* is designed to provide timely, factual information on policies, plans, operations, and technical developments of the center, and interrelated subject matter. Views and opinions expressed in *FUEL LINE* are not necessarily those of the Department of Defense.

Submissions and inquiries should be addressed to: Defense Fuel Supply Center, ATTN. DFSC-DB (*FUEL LINE* Editor), Cameron Station, Alexandria, Va. 22304-6160. The commercial telephone number is (202) 274-6489, Autovon 284-6489.

Major photographic and graphic art services are provided by the Defense Logistics Agency Administrative Support Center, Technical Presentations Division.

AUTUMN 1986

Major General John E. Griffith
U.S. Air Force
Commander
Defense Fuel Supply Center

Captain Richard H. Lee
Supply Corps
U.S. Navy
Deputy Commander
Defense Fuel Supply Center

Donald J. Peters
Public Affairs Officer

Linda M. Stacy-Nichols
Editor

Contents

ORGANIZATIONS AND RESPONSIBILITIES

What Does DFSC Do? 3
The Special Role of the Defense Fuel Regions 6
Quality Assurance and Quality Surveillance 16
The Work of the Military Petroleum Offices 17
Up the Chain: The Defense Logistics Agency 20

SPECIAL TOPICS

The Defense Fuel Supply Cycle and Support Programs 21
How Contracts are Awarded and Administered 25
Inspection and Acceptance Procedures for Posts, Camps, and Stations Bulletin Contracts/The Customer/Depot Complaint Focal Point 35
How is Transportation Arranged? 37
Managing Fuel Facilities 39
The Stock Fund and Financial Administration 41
How Does DFSC Help During Armed Conflicts or Civil Emergencies? 42
DFSC to Test New Defense Fuel Automated Management System Input Method 43
THE *FUEL LINE* INTERVIEW QUESTION 44

REFERENCE

Telephone/Address Directory 46

EDITOR'S NOTE: This edition of the *FUEL LINE* was prepared with DFSC's military consumer in mind but we hope there's enough variety here to address every reader's interests. We have departed a bit from our usual format to provide some in-depth articles on subjects not covered by formal, published guidance. We have tried to keep the tone light and the content pertinent by anticipating questions a DFSC user might ask. We hope you will find this special edition useful enough to retain for reference. Additional copies are available through the DFSC Office of Public Affairs.

The editor thanks everyone within DFSC and outside the center who contributed to this issue—including those with bylines and those without.

Commander's Corner

With this special consumer support edition of the FUEL LINE, we at DFSC have strived to put aside the formality of regulatory publications and write about the concerns and questions of the POL logistics community in a simple, straightforward way. The articles contained in this special edition are as varied as a smorgasbord, ranging from a glimpse at how the stock fund works to how DFSC plans for emergency support. Each article was prepared by a DFSC employee, here at Cameron Station or at one of the Defense Fuel Regions, who draws on his or her experience and insight into fuels logistics. United, these articles tell the story of how DFSC does business; they detail the logistics legwork involved in providing quality fuel in a timely manner for our Nation's soldiers, sailors, airmen, and marines, and for our civilian customers.

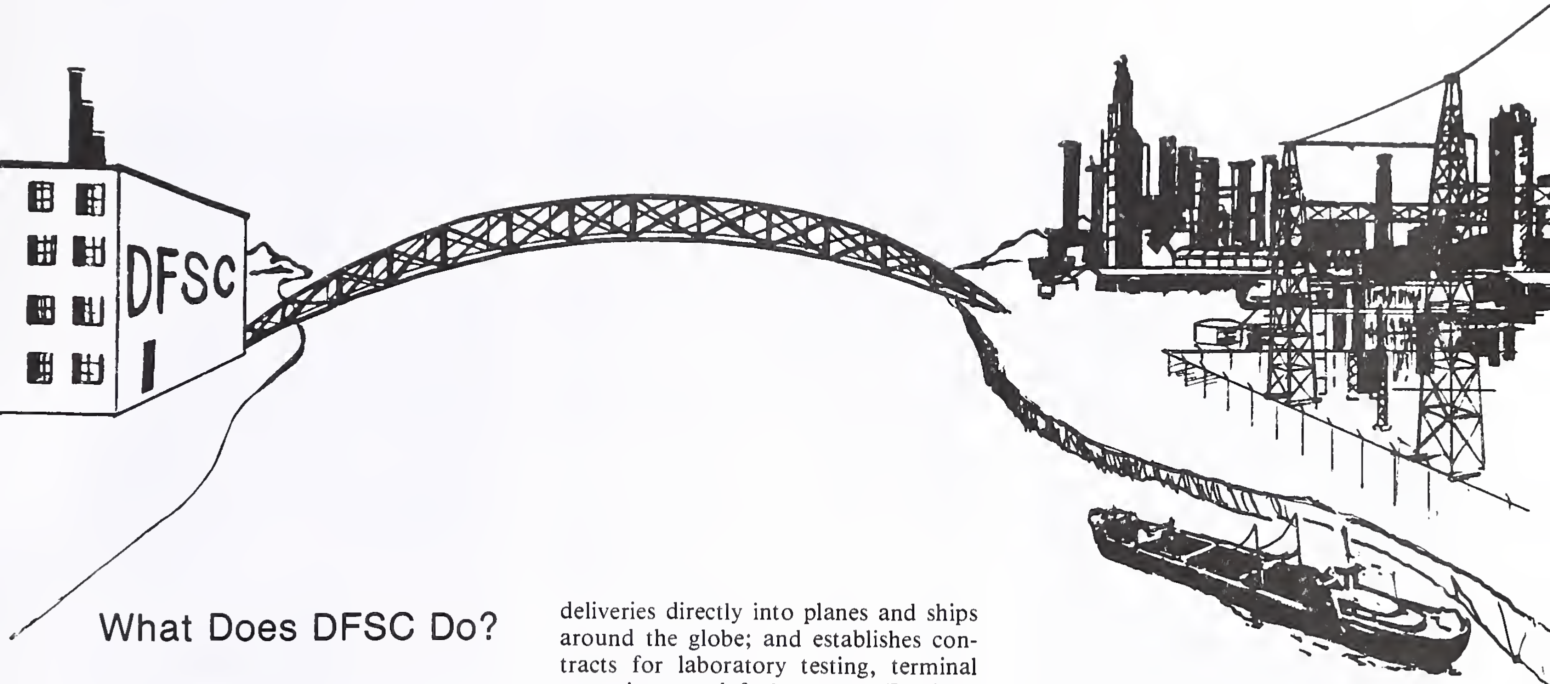
I hope that this special edition will be useful to you. I also hope that this FUEL LINE will remind everyone in the fuels coterie that the sole purpose for our existence is to serve our military and civilian agency fuel users. Embodied in that service is an appreciation of the heroic and vital work our armed forces do, around the clock and around the world, to keep our Nation safe, strong, and free.

JOHN E. GRIFFITH
Major General, USAF
Commander

IN BRIEF

What Does DFSC Do For the Military Services?

- KEEPS QUALITY FUEL FLOWING TO AIRMEN, SAILORS, SOLDIERS, AND MARINES WHEN AND WHERE IT IS NEEDED
- MAINTAINS WORLDWIDE INVENTORIES FOR PEACETIME AND WARTIME NEEDS
- RAPIDLY RESPONDS TO REQUESTS FOR EMERGENCY SUPPLY SUPPORT AND MAINTAINS EMERGENCY DISTRIBUTION PLANS
- MAKES SURE THERE ARE LEGAL AVENUES AVAILABLE TO SECURE AMPLE SUPPLIES OF FUELS DURING SHORTAGES
- ESTABLISHES MANAGEMENT CONTRACTS FOR CONTRACTOR-OWNED, CONTRACTOR-OPERATED TERMINALS AND GOVERNMENT-OWNED, CONTRACTOR-OPERATED TERMINALS
- ENSURES FACILITIES ARE MAINTAINED AND MEET ENVIRONMENTAL AND SAFETY STANDARDS
- PROCURES COAL FOR USE IN THE CONTINENTAL UNITED STATES, ALASKA, AND EUROPE
- ARRANGES FOR SPECIALIZED FUEL SERVICES INCLUDING INTO-PLANE CONTRACTS; ALONGSIDE AIRCRAFT REFUELING; STORAGE; SHIPS BUNKERS CONTRACTS; POSTS, CAMPS, AND STATIONS CONTRACTS; AND THE NATIONAL CREDIT CARD PROGRAM
- MAINTAINS TECHNICAL AND QUALITY STANDARDS AND GUIDANCE FOR FUELS
- ADMINISTERS CONTRACTS TO PROVIDE THE BEST SERVICE AT THE BEST PRICE
- ARRANGES FOR EFFICIENT TRANSPORTATION OF FUELS
- OVERSEES FINANCIAL MANAGEMENT AND ACCOUNTING FOR THE FUELS DIVISION OF THE DEFENSE STOCK FUND
- MAINTAINS CURRENT WORLDWIDE INFORMATION ON PLANT LOCATIONS, PROCESSES, PRODUCTION LEVELS, MARKETS, MAJOR POLICIES AFFECTING OIL, AND NEW ENERGY SOURCES TO USE IN CONTINGENCY PLANNING
- ENSURES STOCKS ARE PROPERLY ROTATED TO MAINTAIN QUALITY
- MAINTAINS COMPUTERIZED INFORMATION ABOUT FUELS
- ARRANGES FOR ENGINEERING, LABORATORY TESTING, AND OTHER FUELS SERVICE CONTRACTS
- CLOSELY MONITORS PETROLEUM LOSSES AND ESTABLISHES PROCEDURES TO CONTROL THEM
- RESOLVES SUPPLY, TRANSPORTATION, AND QUALITY PROBLEMS



What Does DFSC Do?

by Linda Stacy-Nichols, DFSC Office of Public Affairs

"Beans, bullets, and black oil"—the age-old catechism of the military logistician, the cardinal three of any commander going into battle, has been outmoded by unbounded technology. Now the Defense Logistics Agency (DLA) is just as likely to stock such essential items as turbosuperchargers, solenoids, and airborne gyro components. Despite such advances in equipment, never imagined in the days of the logistical three B's, the need for oil remains. Without it, planes don't fly, ships don't sail, and ground equipment does not move.

DFSC handles about 200 million barrels of petroleum products each year. That's enough to fill the New Orleans, La., Superdome about ten times. To represent that same amount of oil in terms of its contract cost in fiscal 1985, one would have to amass 8.5 billion dollar bills. In fact, the center spends about half of DLA's total procurement budget, although DFSC accounts for less than 2 percent of the agency's personnel. (DFSC has contracts for fuel and services with twice as many contractors as there are DFSC employees.) The money goes for relatively few products: 47 National Stock Numbers for petroleum, crude oil for the nation's Strategic Petroleum Reserve (SPR), and a handful of varieties and sizes of coal. But what DFSC's procurements lack in variety of products, they make up for in volume and the array of services needed to deliver and store fuels. The center purchases more petroleum end products than any other single organization or company in the world; coordinates bulk fuel delivery via tanker, barge, rail, truck, and pipeline; arranges for fuel deliveries directly into planes and ships around the globe; and establishes contracts for laboratory testing, terminal operations, and fuel storage. (In fiscal 1985, DFSC also absorbed the DLA Administrative Support Center's base procurement branch and now acquires installation services and supplies for DLA and other activities on Cameron Station.)

The center's commander, Major General John E. Griffith, U.S. Air Force, quite plainly states DFSC's mission as one of "comprehensive worldwide fuel support for the armed forces of the United States—the right fuel, the right quality, the right quantity, the right place, the right time, and the right price—and fuel support to other federal agencies as authorized."

At the heart of this simple statement lies an elemental concern for DFSC's users, including soldiers at some 1,581 Army installations, airmen at 567 Air Force activities, and sailors at some 400 Navy facilities and aboard some 556 ships. Since 1968 DFSC has also procured fuel for certain civilian agencies, including the Postal Service, the Park Service, and the Bureau of Indian Affairs. Among the activities DFSC fuels in the civilian sector are the National Zoological Park in Washington, D.C., the Statue of Liberty in New York, N.Y., and the Park Service at the Grand Canyon in Arizona. The products supplied to meet the diverse needs of military and civilian consumers include jet fuels and aviation gasoline; automotive gasoline; fuel oils for heating, power generation, and ships bunkers; lubricants; and coal.

The majority of DFSC's acquisitions are bulk buys, purchased both overseas and domestically, with jet fuel purchases accounting for about 70 percent of the total. Airplanes are voracious fuel consumers, responsible for about 95 million barrels of jet fuels in fiscal 1985, so it follows that the Air Force is DFSC's biggest user. It is estimated that it would take the average family car about 6 years to burn the same quantity of fuel used in an hour by a B-52 bomber. As would be expected, the Navy is DFSC's second largest fuel consumer, using 34,072,000 barrels of fuel annually on its ships alone (including JP-5 jet fuel as well as distillates and residuals). Although the Army has the largest number of separate installations using DFSC fuel, it consumes the least amount of petroleum of all the military services—15,030,000 barrels last fiscal year. (The Army is, however, the center's largest coal user, outranking the other services on a 2-1 ratio.)

Bulk fuels are stored in 210 fuel terminals worldwide, with operating responsibilities shared by the military services, the North Atlantic Treaty Organization, and DFSC contractors. Since 1 July 1973, however, DFSC has maintained wholesale control over all bulk petroleum down to the base boundary. The center's work as integrated materiel manager includes continual monitoring of peacetime and war reserve petroleum stocks, and their strategic reallocation to meet the shifting global needs of the military services.

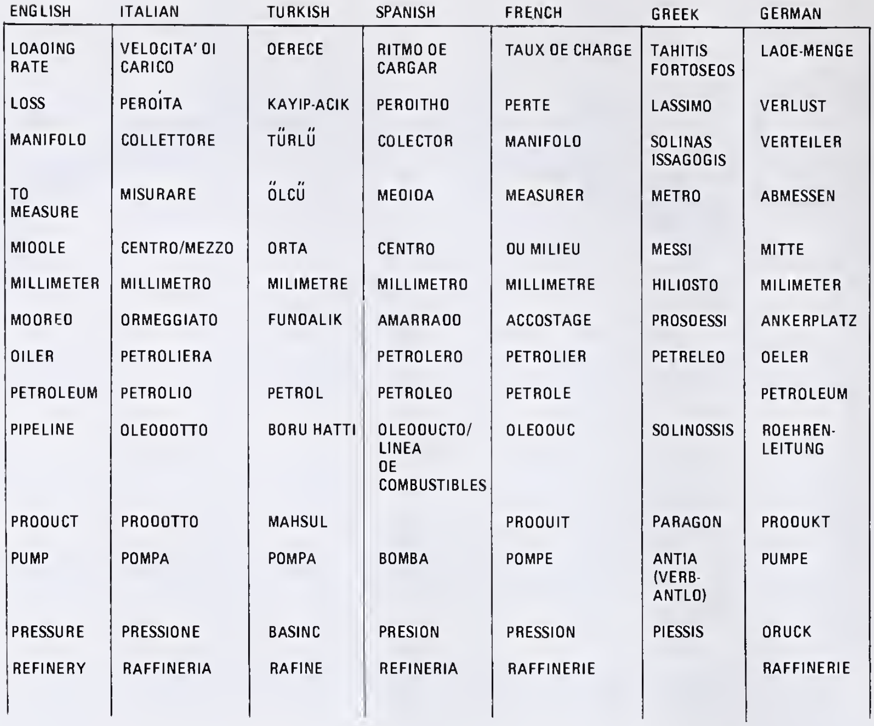
While DFSC's bulk fuels purchases form the backbone of the center's acquisition activities, other types of DFSC contracts are every bit as essential. Under the posts, camps, and stations program, DFSC arranges contracts for fuel deliveries directly to using activities throughout the United States and at overseas locations where U.S. forces are stationed. Most of DFSC's 2,658 federal civilian agency customers are covered under this program, ordering gasoline, distillate heating fuel oils, and other products from some 1900 contracts that keep the government running smoothly. DFSC also supplies coal for about a dozen civilian activities, including several U.S. penitentiaries.

Two special programs serve as adjuncts to posts, camps, and stations acquisitions: one assures the comfort of the president and his family at the White House; the other serves Indians living in remote villages in Alaska. Last fiscal year, DFSC supplied 1,517,308 barrels of gasoline and fuel oils for the D.C. Fuel Yard, which generates power for federal buildings in the nation's capital, including 1600 Pennsylvania Ave. and congressional offices. The Alaskan version of posts, camps, and stations, dubbed *Project Cool Barge*, last year provided about 350,000 barrels of gasolines, jet fuels, heating fuels, and lubricants for military activities in the region, and for Indian villagers who need the fuel to generate life-sustaining electricity and heat.

Way, *way* down south, yet another of DFSC's programs supports the National Science Foundation's research at McMurdo Sound, Antarctica. *Operation Deep Freeze* provides jet fuel, diesel fuel, and automotive gasoline worth about $6 million annually to researchers, and U.S. military personnel stationed in the region described as the coldest, driest, windiest place on earth.

Sometimes it is easier to bring the vessel to the fuel rather than the other way around and DFSC has two types of contracts that accommodate the gargantuan fuel appetites of ships and planes. Into-plane contracts, valued at about $200 million annually, are in place at commercial airports around the world to provide on-the-spot refueling for DFSC customers. Ships bunkers contracts, worth about $92 million, call for delivery of diesel fuels and residual fuels into government vessels at commercial ports.

DFSC has also proven itself both flexible and prompt in responding to exceptional missions. In October 1983, when soldiers of the 82nd Airborne Division deployed to Grenada, DFSC forged an orderly plan to provide immediate and long-range fuel support. First, C-130s ("bladder birds") were fueled at Roosevelt Roads, Puerto Rico; step two involved local purchases from suppliers in Grenada. On 4 November 1983, after the Commander in Chief Atlantic Fleet command determined American forces would require more than a 30-supply of fuel, DFSC issued a solicitation. A competitive contract award was made less than a week later.



ENGLISH	ITALIAN	TURKISH	SPANISH	FRENCH	GREEK	GERMAN
LOAOING RATE	VELOCITA' OI CARICO	OERECE	RITMO OE CARGAR	TAUX OE CHARGE	TAHITIS FORTOSEOS	LAOE-MENGE
LOSS	PEROÍTA	KAYIP-ACIK	PEROITHO	PERTE	LASSIMO	VERLUST
MANIFOLO	COLLETTORE	TÜRLÜ	COLECTOR	MANIFOLO	SOLINAS ISSAGOGIS	VERTEILER
TO MEASURE	MISURARE	ÖLCÜ	MEOIOA	MEASURER	METRO	ABMESSEN
MIOOLE	CENTRO/MEZZO	ORTA	CENTRO	OU MILIEU	MESSI	MITTE
MILLIMETER	MILLIMETRO	MILIMETRE	MILLIMETRO	MILLIMETRE	HILIOSTO	MILIMETER
MOOREO	ORMEGGIATO	FUNOALIK	AMARRAOO	ACCOSTAGE	PROSOESSI	ANKERPLATZ
OILER	PETROLIERA		PETROLERO	PETROLIER	PETRELEO	OELER
PETROLEUM	PETROLIO	PETROL	PETROLEO	PETROLE		PETROLEUM
PIPELINE	OLEOOOTTO	BORU HATTI	OLEOOUCTO/ LINEA OE COMBUSTIBLES	OLEOOUC	SOLINOSSIS	ROEHRENLEITUNG
PROOUCT	PROOOTTO	MAHSUL		PROOUIT	PARAGON	PROOUKT
PUMP	POMPA	POMPA	BOMBA	POMPE	ANTIA (VERB-ANTLO)	PUMPE
PRESSURE	PRESSIONE	BASINC	PRESION	PRESSION	PIESSIS	ORUCK
REFINERY	RAFFINERIA	RAFINE	REFINERIA	RAFFINERIE		RAFFINERIE

A linguistic reminder that DFSC has a worldwide mission: this page is from an international glossary of petroleum terms compiled by Defense Fuel Region Europe for fuels logisticians to use.

DFSC's ten Defense Fuel Regions are vital to its reliable user support. With geographic responsibilities covering the entire continental United States, Alaska, the Middle East, the Pacific, the Caribbean, and Europe, these field offices deal directly with the center's fuel consumers, coordinating all supply and transportation and overseeing matters related to fuel quality, inventories, and the physical condition of fuel terminals. Not only are these field offices the troubleshooters for day-to-day operations, they maintain emergency distribution plans outlining how fuel would be delivered in a crisis.

The cornerstone of DFSC's work is efficient support, but the center also emphasizes judicious use of the taxpayer's dollar. During the past year, spirited competition and an ample supply of petroleum have combined to drive world oil prices down. Even though DFSC's contracts may have been arranged several months back, the center can take advantage of falling prices because of built-in economic price adjustment clauses. These clauses are based on posted market prices and DFSC contract prices are adjusted weekly or monthly, depending on the type of contract.

Yet the center is fully aware of how precarious these good times are and how easily geopolitical factors can cause precipitous changes in the world market. In the fall of 1978, the center had an inventory of about 68 million barrels, prices were relatively stable, and DFSC maintained coverage for most of its contracts. In 1979, there were radical and profound changes in the oil market. Oil producers levied stringent controls on volumes supplied—and the Shah's regime in Iran collapsed, taking with it guaranteed production of 5 billion barrels a day. Meanwhile, a refinery fire in Texas obliterated 60 million gallons of potential DFSC stocks and Hurricanes David and Frederic affected both production and transportation in certain areas of the country. DFSC was forced to draw down on its war reserve inventories, spurring the DFSC commander to make personal visits to oil company executives to explain the Defense Department's plight. The center also took some practical steps to improve coverage for its products by simplifying its solicitation packages and speeding up payments to contractors. Such actions cut through government red tape and made DFSC's contracts more attractive to potential bidders. Ironically, the escalation (economic price adjustment) clauses that are now saving the government money were originally put into

DFSC contracts at the demand of oil contractors who were operating in a dramatically unstable market.

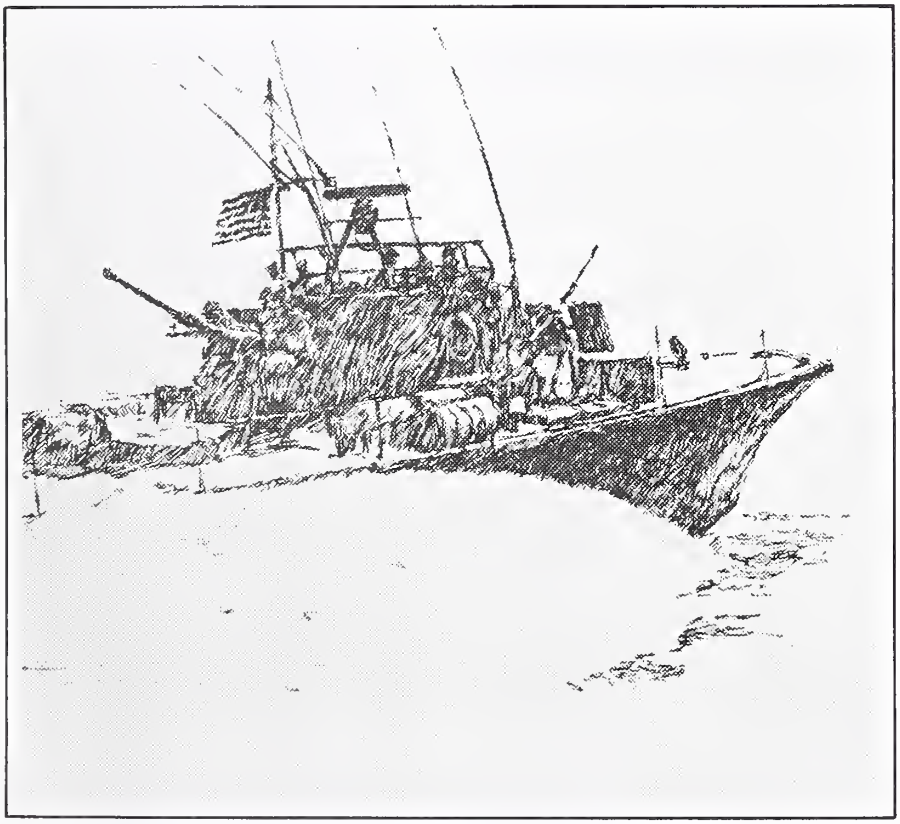
The center's inventories have steadily increased since the lean years. The worldwide wholesale inventory for the end of fiscal 1985 was 98,734,000 barrels, worth $3,432,637,000. Although common sense might seem to dictate that petroleum stocks should be built up when prices are low, there are limits to unqualified growth, including budget restraints, unavailability of storage space, and fuel's vulnerability to weathering and similar quality problems which can be intensified by long periods of storage.

DFSC has, therefore, a number of legal avenues available to secure fuel for our nation's defense during a general supply shortage. These provisions include special emergency procurement authority, access to crude oil from the Naval Petroleum Reserves, and the Defense Production Act. The Defense Production Act enables DFSC to meet the petroleum needs of the military services during conflicts or fuel shortages by securing mandatory supplies from the commercial sector.

The center has also done its share to contribute to the nation's energy independence. In 1977, as part of an agreement between the Department of Energy and the Defense Department, DFSC began purchasing crude oil for the SPR. The reserve is intended to act as a buffer against oil shortages. From 1977 until August 1985, when purchases for the reserve were suspended because of reductions in the fill rate, DFSC purchased 360 million barrels for the 503-million-barrel reserve. The SPR contains enough oil to replace all U.S. petroleum imports for 90 days at current levels and all imports from the Organization of Petroleum Exporting Countries for 223 days.

By all accounts, petroleum will continue as the Defense Department's prime energy source through the year 2000. Still, DFSC is anticipating a time when economical, ready supplies of oil will dwindle and synthetic hydrocarbon fuels, alcohol fuels, and other energy systems will predominate. The center's Office of Synthetic Fuels was created as a link with private industry and other government agencies to maintain DFSC's interests as alternate fuels are developed and tested. One pilot program to support extracting oil from shale rock has been in place since October 1981. As part of the program, DFSC is entitled to 10,000 barrels per day of product in exchange for government support of the company's operation. Under the current terms of the agreement, which was modified in October 1985, the product guarantee could extend until the year 2003.

Alternative fuels will one day be used routinely to keep military and civilian government operations running smoothly. For the next two decades, however, DFSC will keep procuring the age-old fossil fuels that power our ultramodern military hardware, ensure the comfort and safety of our nation's leaders in Washington, D.C., and make sure we all regularly receive our mail.



HISTORY

"The Army-Navy Petroleum Board is strictly a product of this war [World War II]. It came naturally into being and grew in strength as the high military authorities saw their dominance in the war being developed by the internal combustion engine. As they measured the fuel needed for war areas whose land was to be covered by mobile equipment of all kinds, and whose air was to be crowded with tens of thousands of planes, and as they saw the seas with great flotillas of fighting vessels, also driven by petroleum, and great convoys of supply ships moved by oil, and carrying munitions and more petroleum to the fighting units, the need for procuring and handling petroleum products on the most gigantic scale in history was driven home and the Army-Navy Petroleum Board was born."

—From an August 1945 edition of *National Petroleum News*

And thus DFSC's earliest precursor organization, the Army-Navy Petroleum Board, was established on 14 July 1942.

EDITOR'S NOTE: Addresses and telephone numbers for the Defense Fuel Regions (DFRs) are listed in the reference section of this special edition. Each year, the Directorate of Quality Assurance and Technical Services publishes a Petroleum Quality Assurance/Quality Surveillance Roster that provides detailed information on quality assurance and surveillance locations and personnel. Readers requiring a copy may contact the directorate directly.

In Their Own Words

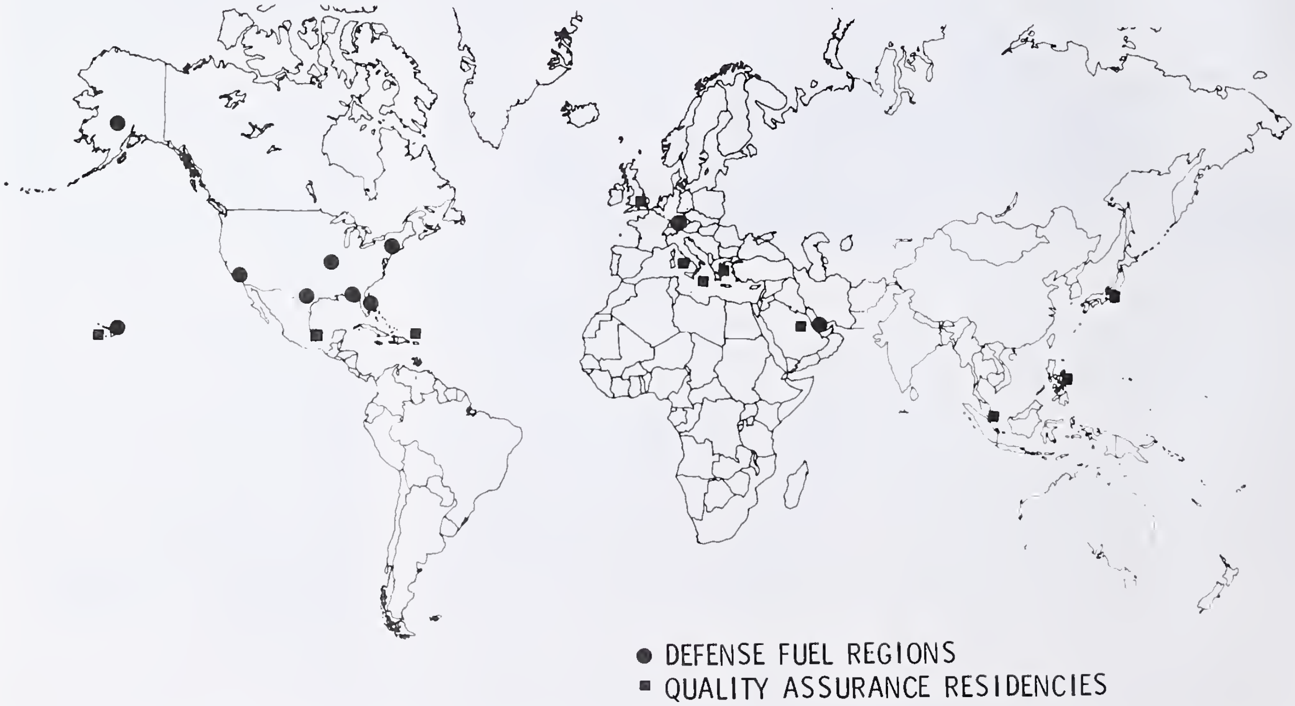
The Special Role of the Defense Fuel Regions

What do DFRs do for their military consumers? In the words of one DFR commander, "If bulk aviation and marine fuels and lube oils were a Broadway musical, the DFR would be the choreographer. After DFSC headquarters procures the fuel and issues a master distribution plan, the DFR develops the most economical, yet effective, support patterns for each customer in the region, makes all of the necessary arrangements for timely and smooth execution of the plans (including cost studies, Source Identification and Ordering Authorization (SIOATH), route orders, Emergency Distribution Plans, and the like), and then monitors the performances."

DFR personnel are indeed choreographers—and much more. They are DFSC's vital link with users, transportation officials, and terminal managers; they are troubleshooters and puzzle solvers; inspectors; investigators; analysts; and custodians; they are logisticians in an all-encompassing sense. Their prime mission is, of course, getting the right fuel, in the right amounts, to the right place at the right time, but achieving such efficient support to DFSC's consumers requires a host of supporting actions. DFRs manage terminal operations and inventories at Defense Fuel Support Points (DFSPs), carry out the DFSC quality assurance and surveillance programs, monitor quality control problems and procedures, oversee existing or potential environmental control dilemmas, maintain and carry out Emergency Distribution Plans, manage supply of products to consumers in the region, develop operating levels for DFSPs, monitor changes in terminal tankage, schedule product movements, provide transportation and traffic management aid to move bulk petroleum worldwide, resolve freight shipment discrepancies, establish and review pipeline operating agreements, make periodic checks on contractor-operated bulk petroleum storage facilities to evaluate management of government property, document stock reporting by contractors, monitor fuel disposal actions and problems—and much, much more.

As was noted in the introductory portion of this special edition of the *FUEL LINE*, DFSC maintains five DFRs in the continental United States (CONUS) and one each in Alaska, Europe, the Pacific, and the Middle East. A tenth field office, DFR-Caribbean, is located at Homestead Air Force Base, Fla., but its regional responsibilities are in the Caribbean. Worldwide, there are currently 11 Defense Fuel Quality Assurance Residencies which report directly to

DFSC FIELD ACTIVITIES



DFRs in their respective areas; in CONUS, there are now 36 Quality Surveillance Residencies. These residencies are constantly being established or disestablished depending on the shifting needs of DFSC's contracts and consumers.

The summaries that follow were prepared by DFSC's DFRs. They highlight some tasks that are unique to certain geographical areas and also discuss themes common to all.

DFR-SOUTHEAST, Tyndall Air Force Base, Fla., Commander: Lieutenant Colonel Don Kudrna, U.S. Air Force

AREAS SERVICED:

Alabama
Florida
Georgia
Kentucky
Mississippi
North Carolina
South Carolina
Tennessee

After DFSC awards contracts, contract information is disseminated directly to users for ground fuels or to the DFRs for aviation products. DFRs provide consumers with a SIOATH, enabling them to call for fuel, and an Emergency Distribution Plan, which outlines how war reserve materiel stocks will be delivered in an emergency. While a lot of emphasis is placed on doing things at the lowest cost, mission effectiveness still stands as the number one priority.

Using activities are used to dealing primarily with one of the inventory managers working in the Supply Division of the DFR. Consumers are assigned to a manager based on their geographical area and that manager, with few exceptions, coordinates all transportation and supply actions affecting that consumer. The Transportation Division provides traffic management support for movement of bulk petroleum. It also prepares government bills of lading, traces movements, investigates claims, and negotiates agreements with pipeline carriers. The supply personnel schedule product movement, manage inventory levels, administer contracts, and manage the DFSPs. Our resident engineer conducts staff visits to government-owned fuel terminals and is responsible for construction and repair programs. The quality function is relatively new to the regions. Up until 1984 the Defense Contract Administration Services (DCAS) was responsible for ensuring product quality. DCAS still provides quality assurance for product being procured by the government in CONUS. However, once the government accepts the product, quality is the responsibility of our quality surveillance representatives.

All fuel obviously comes from a refinery and it would be a simple and economical matter if we could get our fuel directly from a refinery. Although 30 percent of our requirements in the Southeast are met by direct deliveries from the refinery to the consumer, most of the fuel in our region has to be brought in from refineries outside our area by pipeline, tanker, and barge, and unloaded into interim storage at DFSPs.

DFSPs fall into four categories in our region: government-owned, contractor-operated; government-owned, government-operated; contractor-owned, contractor-operated; and pipeline companies. The DFSPs serve both as redistribution points and as reserve storage locations.

Movement of product to our end users is done by truck, rail, barge, or pipeline. Decisions on the source and mode of transportation used are based on the lowest laid-down cost. This is not to say that mission impact or consumer desires are not considered. They are considered and we occasionally use an alternate, higher-cost mode.

The customer can help lower costs by accurately reporting receiving capabilities and by being aware of the impact of using alternate modes. In fiscal 1985, for example, product movement was evenly divided among the four modes but trucking accounted for almost half of the overall cost because motor rates are more than 30 percent higher than rail. This is not immediately obvious to our consumers because most people see only the standard price and are not aware when the government is feeling a significant impact.

The transportation industry is highly competitive; we can and do take advantage of the situation. As has been noted, the least expensive carrier gets the business. We can drive costs even lower by offering all traffic between two points for a given period of time to a single, low bidder. In the truck and rail business this is called guaranteed traffic. Barge companies refer to this as a volume move. We can also enter into affreightment agreements with barges by guaranteeing business to a barge company through a long-term lease of equipment and crews. As a result, we get increased flexibility because the barges are dedicated to our use. Even our spot barge movements are competitive because barge owners scramble for business in a depressed oil market. Pipelines, generally speaking, are currently the least costly way of moving fuel; in the Southeast we now have seven dedicated systems.

Another vital element is quality—here we really need consumer cooperation. DFSC is charged with providing clean, on-specification fuel. DFSC believes in this issue to the extent that it argued for and got full-time quality representatives attached to each region. In the Southeast, we have seven quality representatives in the field with a quality manager and specialist in the region office. But keep in mind that all fuel is not inspected by a quality representative. Under alternate release procedures, trucks, tank cars, and even pipeline movements are completed without a quality representative being present. His or her signature is placed on the shipping document after the fact. Consumers should make sure they don't let their quality surveillance at the base level slip. If they have problems, they should notify their quality representative or DFR office immediately. There are different actions we can take depending on the circumstances.

Sometimes the DFR must perform balancing or juggling acts in order to effectively serve all interests; this may occasionally be irritating or slightly disruptive for the consumer. For example, the DFR might have to change an activity's supply source two or three times a year in order to lift pro rata from bulk contracts or to compensate for temporary supplier, carrier, or quality constraints. On the other hand, the DFR might have to make extensive resupply adjustments to accommodate user requirements, such as short-notice removal of a storage tank from service, an accelerated tank fill, increased fuel for flying surges, and so on.

So if an activity is unhappy with or doesn't understand some aspect of its support pattern, the DFR should be contacted—not the supplier and not the carrier because they are simply following DFR instructions. All participants in the fuel distribution pattern are strongly encouraged to notify the DFR of any recurring problems. The DFR will move quickly to resolve the differences and prevent deterioration of good working relationships.

All told, we support over 100 military, state, and federal elements with approximately 930 million gallons of petroleum products each year.

DFR-SOUTHWEST, Houston, Texas, Commander: Lieutenant Colonel Lloyd Johnson, Quartermaster Corps, U.S. Army

AREAS SERVICED:
Arkansas
Louisiana
New Mexico
Oklahoma
Texas

DFR-Southwest covers a five-state area, has 12 DFSPs, and provides bulk fuel for about 80 consumers using ocean tanker, barge, pipeline, truck, and rail transportation. The annual throughput of all products handled, including JP-5 and JP-4 jet fuels and diesel fuel marine, is in excess of 1.6 billion gallons. The total DFSP storage for bulk fuel within the region is 3.8 million barrels. The Hess terminal in Houston is the largest with approximately 2.3 million barrels of storage capacity.

The following highlights describe some of the activities we've been involved in recently:

- In recent months our Houston Quality Surveillance Residency has sampled and tested fuel used for Air Force One (presidential plane) visits to the area. We have assisted the Ellington Field Air National Guard in pulling samples, transporting them to the DFSC contractor laboratory, and witnessing/certifying test procedures.
- In February 1986, a temporary DFSP was established at the ITAPCO terminal in Little Rock, Ark., to replace DFSP Conway, which was closed because the Sun Pipeline System was sold. The DFSP supports Little Rock Air Force Base and several smaller Arkansas consumers by truck with resupply of the 75,000- barrel terminal made by barge from Gulf Coast sources. In September 1986, a solicitation was issued to provide for a permanent contractor-owned, contractor-operated DFSP in the area that can deliver fuel by pipeline to Little Rock Air Force Base, thereby saving transportation money. The DFSP, which should be operating by February 1987, is slated to feature 160,000 barrels of storage, pipeline capability to the air force base, a truck-loading stand, and the ability to receive by barge or pipeline.
- DFR quality surveillance representatives have recently started inspecting Military Sealift Command (MSC) TA5-class (inert-type) tankers that are to be loaded at DFSP Houston, Texas, while the vessels are at anchor in Galveston Bay, Texas. Such inspections enable tankers to begin "inerting" procedures prior to their Houston dock arrival, saving about 12 hours of time at the DFSP Houston docks and, in turn, increasing tanker turnaround time. To inspect the tankers in the bay, the quality representative travels 50 miles from Houston to Galveston and then boards an MSC-provided launch for transport some 5 miles to the ship.
- The DFR is currently working with the Air Force Directorate of Energy Management at Kelly Air Force Base, Texas, to resolve fuel filter problems at Vance and Tinker Air Force Bases in Oklahoma, and McConnel Air Force Base in Kansas. Filter elements normally last 2 years but the bases found they were changing elements after only 2 months in service because of premature differential pressure buildup. The Energy Management Directorate suspected that the culprit was the conductivity additive blended in the JP-4 jet fuel. To investigate this probable cause of the problem, DFR-Southwest changed the brand of conductivity additive being used for a trial period beginning in August 1986.
- Tankers slated to arrive at CONUS ports with products procured and loaded in a foreign country are required to have their cargo cleared through the U.S. Customs Service before the product can be discharged. Handling these foreign cargoes has become routine now for quality representatives in the region, who must satisfy all customs' requirements by providing a copy of the loading document and completing several other forms. The source for most foreign products thus far has been Venezuela, which ships diesel fuel marine under contract. The product is received at DFSP Houston, Texas, and subsequently shipped by tanker or pipeline to several destinations.

DFR-NORTHEAST, McGuire Air Force Base, N.J., Commander: Lieutenant Colonel Charles Nault, U.S. Air Force

AREAS SERVICED:

Connecticut
Delaware
District of Columbia
Maine
Maryland
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania
Rhode Island
Vermont
Virginia
West Virginia

DFR-Northeast is responsible for providing efficient and economical supply of bulk petroleum products to 117 activities within 13 states and the District of Columbia. Twenty-one DFSPs are located in the region to provide the most efficient and economic support possible to the region's consumers.

Inventory managers prepare SIOATH documents which identify to the activities their source of supply, quantities authorized for shipment, shipping points, and other data essential to the requisitioning and shipment of fuels and contract administration. SIOATHs are prepared for Defense Logistics Agency (DLA)-owned product shipped from DFSPs and for fuels delivered directly from contractors to users. Inventory managers order products from contractors; schedule deliveries for tank trucks, barges, and pipelines; and prepare tanker slates. Schedules for loading, lifting, discharge, and arrival are coordinated with suppliers, consumers, quality surveillance representatives in the region, and DCAS quality assurance representatives. Supply managers control inventories and account for all DLA-owned fuel in the region. All auditable transactions for DLA-owned product within the region, including shipments, receipts, and inventory adjustments, are processed into the Defense Fuel Automated Management System's central data bank at Cameron Station in Alexandria, Va., via a remote cathode-ray tube located at the region.

Supply personnel also oversee terminal tankage: recommending additions, deletions, or conversions; developing operating levels for DFSPs; and managing inventories to make sure proper levels are maintained.

To provide effective contract management, DFR personnel make sure orders are on time and contractors who fail to perform are properly reported. The DFR identifies contractor problems, schedules meetings with contractors, and recommends default actions to DFSC contracting officers. Inventory managers maintain current contracts to ensure pro rata liftings and prevent overobligation of funds or quantities according to the Distribution Plan Authorization. The DFR may also revise this plan to minimize contract underlifts and gain maximum benefits from available contracts.

In 1983 the DFRs were given oversight responsibility for the physical condition of government-owned, contractor-operated terminals. Contracts were changed so that maintenance of facilities or services that are beyond the scope of those spelled out in the contract require a requisition document and a task order to the contractor before the service can be performed. Monetary limits are placed on these DFR-prepared requisitions.

These work requests are screened to make sure they do not include work already covered under the terms of the basic contract or work on an approved construction project. They also must meet the criteria for procurement action under terms of the terminal contract.

The DFR's regional engineer administers maintenance, repair, and construction projects at government-owned, contractor-operated terminals to keep the terminals in working order and in compliance with safety, environmental, and security regulations. Once the requirement for a project has been identified, a "scope of work" and cost estimate is forwarded through DFSC to the responsible construction agency (either the Corps of Engineers or Navy Facilities Engineering Command). The agency obtains a firm to design the project and then awards a contract for the construction. (Reviews are periodically made during construction to make sure the original plan is adhered to and that the work is progressing.)

During such construction, the DFR works to minimize any adverse effect on the terminal's operation.

Quality Surveillance Representatives— Blessed With More Than One Function

by Terry Knight, DFR Northeast

Quality surveillance representatives are the eyes and ears of DFR-Northeast and DFSC. They are located in the field and they are blessed with more than one function. Monitoring quality, which itself requires undivided attention and critical inspection, is just one of their jobs. The representatives operate around-the-clock, 7 days a week, through the night, during rain, sleet, and snow. At times they must make decisions involving huge amounts of money, such as tanker receipts/shipments in the $12 million to $15 million range. Their time is spent climbing tanks, working on tankers and barges, witnessing pipeline movements, testing numerous samples, and inspecting contractors' quality control procedures. Some representatives also have additional responsibilities such as serving as contracting officers' representatives, a position which empowers them to spend government funds at government-owned, contractor-operated terminals.

All of these tasks take time away from families and private lives: Sunday dinners may have to wait until Tuesday; tickets to ball games may have to be given away. Representatives also work for compensatory time compensation rather than overtime pay. This unselfishness has reduced overtime in the region by 1,000 hours in 5 months.

DFR-CARIBBEAN, Homestead Air Force Base, Fla., Commander: Commander Richard Kline, Supply Corps, U.S. Navy

AREAS SERVICED:

Central America
Dominican Republic
Haiti
Jamaica
Mexico
Netherlands Antilles
Puerto Rico
South America
Tobago
Trinidad
Virgin Islands
West Indies

DFR-Caribbean Lends a Hand

In October 1985 the U.S. Military Group El Salvador requested that DFR-Caribbean conduct a storage and distribution facility review of Ilapango Air Base, which is located near San Salvador.

The facility review was conducted by the region's quality assurance manager, William Rankin, and a quality assurance representative, Felix Shepherd. During their review, they found inadequate procedures being used for receiving and distribution and determined that the storage tanks were in serious need of major cleaning.

Shortly after receiving these recommendations, Ilapango Air Base personnel took quick action to improve receiving and distribution procedures. The regional personnel working with the military group arranged the funding and contract for the tank cleaning. A Salvadoran contractor completed the cleaning in May 1986 and the results were inspected by regional quality assurance representative Sergio Santiago.

Regional personnel are currently inspecting the Ilapango facilities bimonthly to maintain their high quality.

DFR-Caribbean is willing and eager to provide such assistance to all the military services throughout the Caribbean, and in Central and South America.

DFR-ALASKA, Elmendorf Air Force Base, Alaska, Commander: Major Lewis Aiken, U.S. Air Force

AREAS SERVICED:

Alaska
Aleutian Islands (Except Adak)
Yukon Territory

Alaska is unique. This statement has been repeated so often it has become a cliché. It is, nonetheless, true. The distances involved in Alaskan fuel resupply are vast. From east to west, Alaska covers a distance equivalent to that from Savannah, Ga., to San Francisco, Calif. From north to south, the equivalent is from the Texas panhandle to the Canadian border. In terms of gallons of fuel delivered, Alaska is probably the smallest of the regions, but in terms of sites to which fuel is delivered, it is probably the largest with over 175 delivery locations.

Of the 175-plus sites for which we are responsible, more than 160 are part of the *Cool Barge* resupply program. *Cool Barge,* which is administered by the Air Force, involves dry cargo as well as fuels. DFR-Alaska collects requirements from the military services (and such civilian agencies as the Bureau of Indian Affairs, the National Oceanic and Atmospheric Agency, and the Fish and Wildlife Service), as well as the Coast Guard and the Alaska Army National Guard. These requirements are submitted to DFSC to be procured at various locations in Alaska and on the West Coast as the barge schedule dictates. MSC is responsible for obtaining the barge contracts.

Sites serviced by *Cool Barge* will typically receive only one delivery a year and therefore must be able to store their annual requirement of fuel. Deliveries are limited to April through September each year with shipments to the northern part of the Alaskan West Coast and sites along the Arctic Ocean North Slope restricted to a 6-week window in June and July. At other times, the ice prohibits movement.

In addition to its climate and geography, the DFR is unique in other ways. It has only government-owned, government-operated terminals: three are operated by the Army on the Alaska mainland and one is run by the Navy on Adak in the Aleutian Islands. DFR-Alaska is also unique in that it plays three roles. During normal operations it reports to the DFSC commander. In wartime or during another contingency, however, when the Joint Task Force-Alaska (JTF-A) is activated, DFR-Alaska becomes a Joint Petroleum Office reporting to the JTF-A commander. Its third role is that of Sub-Area Petroleum Office reporting to the Pacific Command's Joint Petroleum Office for that portion of the Aleutian Islands that are in the Pacific Theater.

DFR-PACIFIC, Camp H.M. Smith, Hawaii, Commander: Commander L.A. Van Rooy, Supply Corps, U.S. Navy

AREAS SERVICED:

Adak
Australia
Bangladesh
Burma
Cambodia
Ceylon
Diego Garcia
East Indies
Hawaiian Islands
Hong Kong
India
Indonesia
Islands of Central and South Pacific
Japan
New Zealand
Okinawa Islands
Philippine Islands
Republic of Korea
Singapore
Taiwan

Petroleum contracts supporting the Pacific Command's peacetime operations provide about 37 million barrels of product valued in excess of $1 billion. Quality assurance representatives in the region also regularly inspect 20 contractor-operated into-plane refueling locations at commercial airports to provide quality products and safe operations. The region has property administration and management responsibilities for over 5.8 million barrels of DLA product located in eight contractor-owned, contractor-operated locations in Japan, Singapore, and Guam. The region maintains close liaison with 14 Pacific Command DFSPs operated by the military services, insuring resupply or inventory reporting problems are quickly solved.

Some of the special initiatives and issues DFR-Pacific has worked on over the past few months include:

- To provide for the increased fuel needs of its customers and to augment critical supply storage shortfalls, the DFR established 1.3 million barrels of additional leased bulk fuel storage on Japan and Guam. The new storage locations are in Hachinohe and Southern Hokkaido, Japan, and at the Guam Oil and Refining Co. on Guam. To help establish the new storage, the DFR completed preaward surveys on prospective contractors and assisted them in their property administration and quality control plans.
- After a fire at the Pearl Harbor storage facilities in October 1985, the DFR coordinated the blending and redistribution of contaminated aviation gasoline stored in the damaged tanks. The recommended course of action, blending the aviation gasoline with regular grade automotive gasoline to create premium automotive gasoline, saved further losses to the stock fund estimated to be over $1 million. The blending was done at DFSP Pearl Harbor and the blended product was then transported to Japan to satisfy requirements there.
- The region arranged for an emergency resupply of 2,000 barrels of aviation gasoline to be purchased locally by Naval Supply Center Pearl Harbor for shipment to the Kwajalein Missile Range. The shipment avoided a supply failure that would have delayed research and development on the Strategic Defense Initiative.
- The DFR coordinated a plan to establish a new DFSP at the Royal Navy Senoko Fuel Terminal at Sembawang Port, Singapore. The new DFSP had 169,830 barrels of JP-5 jet fuel and 220,150 barrels of diesel fuel marine capitalized at the beginning of the fiscal year. The new DFSP will save the Navy about $800,000 a year in operating costs.
- In response to an Air Force request, DFSC has agreed to make the Clark-Subic Pipeline a DFSP effective at the beginning of fiscal 1987. This will relieve the Air Force of approximately $250,000 in annual repair and maintenance costs and will enable DFSC to allocate enough money to guarantee the critical pipeline transfer capability between Naval Supply Depot Subic Bay and Clark Air Base.
- Rather than downgrade or blend excess LA-2 piston engine lubricating oil at Naval Supply Center Pearl Harbor, the region coordinated the transfer of the oil to Naval Air Stations Alameda and North Island in California to satisfy requirements there. This redistribution in place of blending saved about $30,000 and avoided procurement costs for the 44,000-gallon West Coast requirements.

DFR-MIDDLE EAST, Bahrain, Commander: Major Larry Matthews, Quartermaster Corps, U.S. Army

AREAS SERVICED:

Afghanistan
Bahrain
Djibouti
Egypt
Ethiopia
Iraq
Jordan
Kenya
Kuwait
Malagasy Republic
Oman
Pakistan
Qatar
Saudi Arabia
Seychelles Islands
Somalia
Sudan
United Arab Emirates

DFR-EUROPE, Stuttgart, Germany, Commander: Colonel Terry Wagner, Quartermaster Corps, U.S. Army

AREAS SERVICED:

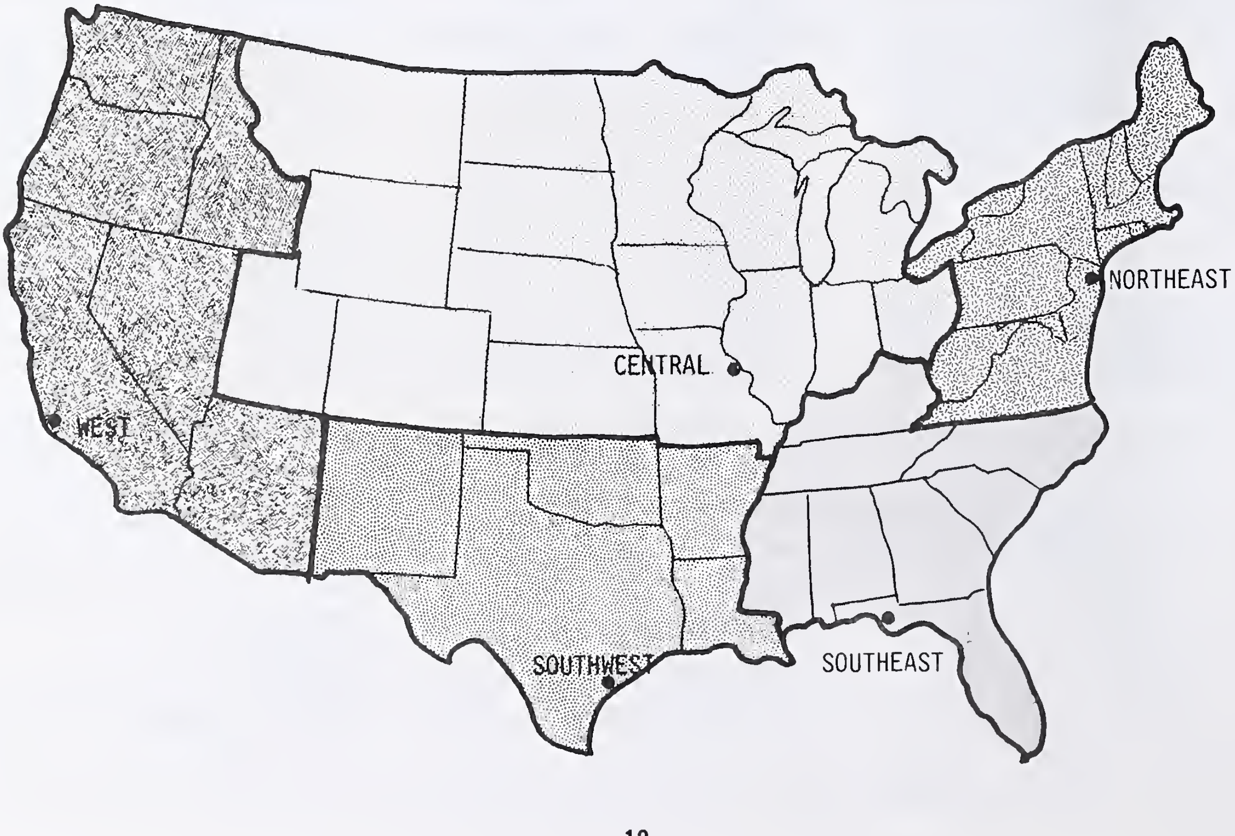
Africa (except Egypt, Sudan, Oman, Kenya, Somalia, Ethiopia)
Azores
Belgium
British Isles
Canary Islands
Corsica
Crete
Cyprus
Denmark
Finland
France
Germany
Greece
Italy
Lebanon
Luxemborg
Netherlands
Norway
Portugal
Sardinia
Sicily
Spain
Sweden
Switzerland
Syria
Turkey

Working together in a team effort, representatives of DFSC, DFR-Europe, and U.S. Air Force Europe negotiated a memorandum of understanding with the government of Denmark for storage of over 40,000 cubic meters (1,400,000 cubic feet) for jet fuel in the Northern European Pipeline System. This is a significant strategic accomplishment.

DFR-WEST, San Pedro, Calif., Commander: Lieutenant Colonel Eusebio Paguyo, U.S. Air Force

AREAS SERVICED:

Arizona
California
Idaho
Nevada
Oregon
Washington



DFR-CENTRAL, St. Louis, Mo., Commander: Lieutenant Colonel James Williams, Quartermaster Corps, U.S. Army

AREAS SERVICED:

- Colorado
- Illinois
- Indiana
- Iowa
- Kansas
- Michigan
- Minnesota
- Missouri
- Montana
- Nebraska
- North Dakota
- Ohio
- South Dakota
- Utah
- Wisconsin
- Wyoming

SUPPLY MANAGEMENT—MAINTAINING THE BALANCE

by Steve Fonod, Inventory Management Specialist

DFR-Central supports authorized federal agencies in a 16-state area encompassing the North Central United States. Included is the responsibility to ensure resupply to six government-owned or contractor-owned DFSPs. In addition, the DFR manages government-owned petroleum products in nine pipeline and three pipeline tankage operations. The DFR accounted for $477 million for JP-4 jet fuel alone in fiscal 1986.

DFR-Central also is responsible for support of seven activities located outside of the region's geographic boundaries with product originating in or passing through systems or facilities in the DFR.

DFR-Central must quickly respond to disruptions in resupply patterns. An example is the recent rupture and explosion of a pipeline that delivers fuel to DFSP Wrenshall, Minn. Because of the closure, it was imperative that alternate support sources be identified and conveyances assigned to move fuel until service could be restored. Product has continued to move, uninterrupted and consistent with requirements.

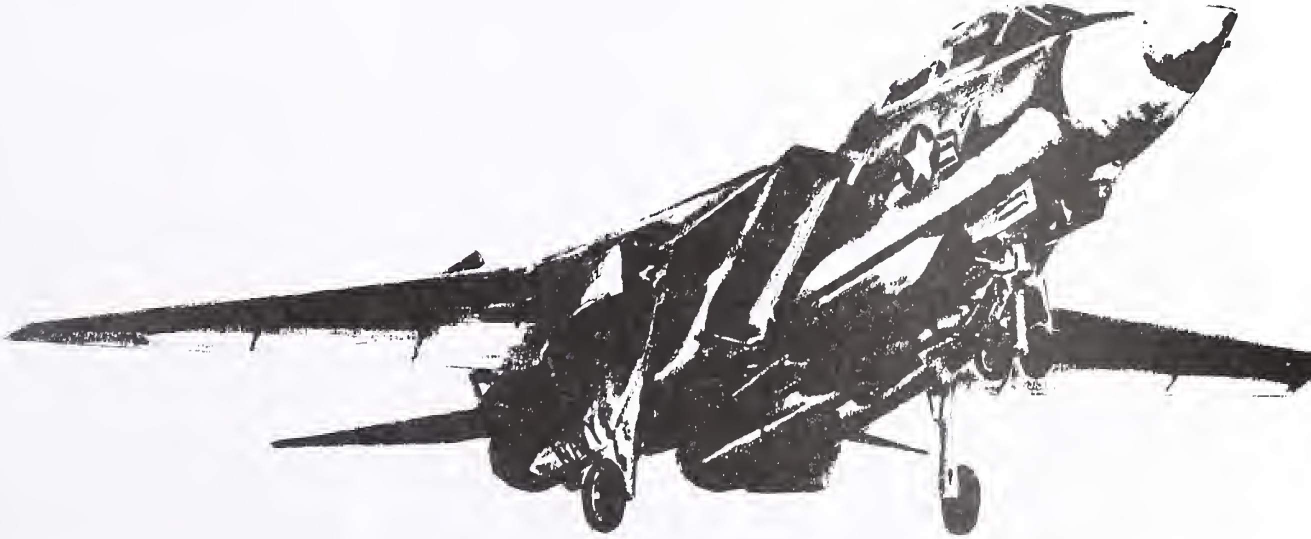
The DFR is also challenged to provide additional quantities of fuel for unforeseen or unforecasted demands. Frequently, these actions relate to readiness exercises, such as a recent Air National Guard exercise in Wisconsin which required amounts of fuel that tripled normal consumption for the period.

DFR-Central regularly conducts cost analyses to determine the most efficient and effective sources of product for supported activities and DFSPs. These analyses enable the DFR to avoid unnecessary expenditures of funds while assuring a balanced distribution capability.

Property administration is a management function of the region. This function ensures that government property is afforded care, protection, and accountability. Annual on-site inspection by DFR personnel is prescribed to ensure that records, procedures, and reports are accurate and complete.

The region administers 16 bulk fuel contracts, seeing that direct delivery is timely, accurate, and responsive to consumer needs. In addition, assistance is provided to both consumers and contractors to resolve fuel-related problems: DFAMS inputs, demand forecasting, accounting, reporting, and management procedures.

DFR-Central prides itself on its team spirit in accomplishing its assigned missions. Regional personnel strive to be responsive to all activities' needs and questions. Through the use of computer products, personal visits, and regular contact with users, the region strives to keep abreast of trends and to forecast requirements accurately. Our goal is to anticipate and avoid negative situations rather than "crisis" management.



Transportation Management—A Distribution Challenge

by Dennis Edwards, Traffic Manager

The fiscal 1986 distribution pattern for JP-5 jet fuel support of Naval Air Station (NAS) Glenview, Ill., provided for tank truck shipments from DFSP Cincinnati, Ohio. One driving factor for this extraordinary movement was the lack of JP-5 offerings by suppliers closer to NAS Glenview.

The activity has a limited amount of jet fuel storage, and this, combined with the distance involved with the movement to the Chicago area from Cincinnati, makes truck shipment especially sensitive to disruption due to winter weather conditions and carrier equipment availability.

Support of this movement has proven to be especially difficult, even using a dedicated carrier under the Guaranteed Traffic Program. The difficulty is due primarily to the fact that the daily demand rate fluctuates, and carrier equipment generally must be cleaned prior to loading when it has been in other product service.

Given this situation, DFR-Central investigated alternatives, such as establishing a DFSP facility in the greater Chicago area, and developing Chicago area supplier interest in producing JP-5. In the process of evaluating the potential for a Chicago DFSP, it became obvious the fuel would still have to be delivered from outside the immediate area. Lacking pipeline system flexibility, and faced with only one JP-5 stock point, it appeared JP-5 would have to be redistributed from DFSP Cincinnati via barge on the inland waterways.

A survey of barge carriers identified an interested carrier, which, after being briefed on the difficulty of securing tankage and truck-loading facilities, was enticed to develop its own Chicago-based redistribution system. This culminated in an innovative proposal by the carrier to furnish a complete delivery package wherein it proposed to load a 3-month supply of JP-5 at Cincinnati, transport it to the Port of Chicago, discharge it into carrier-leased tankage, and provide testing, terminal management, administration, and final tank truck delivery to NAS Glenview, 14 miles away. Meanwhile, the DFR effort to stimulate interest in a contractor terminal operation proved futile.

The original cost data were competitive, and the carrier intends to compete against direct truck movements on the annual Guaranteed Traffic solicitation in the fall of 1986. There are indications that this proposal may be successful. The result would be a more efficient resupply method which is less susceptible to adverse weather, and can be more responsive to the consumer's needs.

QUALITY SURVEILLANCE—VIGILANCE FOR THE UNUSUAL

by Thomas Roberson, Quality Manager

DFR-Central's quality surveillance representatives (QSRs) are challenged with a variety of quality problems in the conduct of their duties. These challenges are not limited to resolving contamination of government-owned fuel. During fiscal 1986, QSRs responded to a variety of quality problems at DFSP terminals, ranging from pipeline breaks, high-corrosion test factors, contamination of product in tankage, contaminated barges, and actions associated with the default of a DFSP terminal contractor.

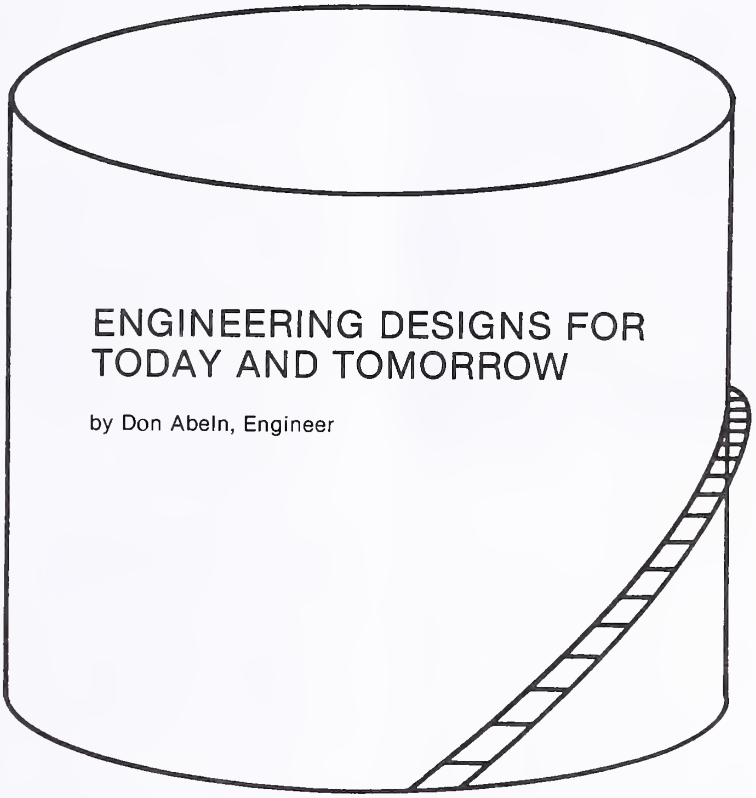
For example, the QSR at the Grand Forks DFSP, while performing a weekly pipeline patrol, identified a probable pipeline leak. Appropriate testing verified the presence of JP-4 in the soil. He immediately started cleanup; a repair crew was dispatched from St. Paul, Minn. The pipeline was repaired within 72 hours and mission essential JP-4 continued to Grand Forks Air Force Base. This specific section of pipeline had been of particular concern to the QSR because there had been three leaks identified and repaired there in less than a year. In all cases the leaks were identified prior to a major JP-4 spill which avoided major safety and environmental hazards. The cause of the leaks proved to be external corrosion, probably as a result inadequate cathodic protection, faulty pipewrapping, defective pipe, faulty installation, or a combination of these factors.

In a different situation, the QSR at Bay City, Mich., identified a high-corrosion factor while testing a pipeline shipment of 40,000 barrels of JP-4 jet fuel. The fuel was purchased f.o.b. origin at a refinery where it passed all specifications testing prior to custody change to a common carrier pipeline. Upon receipt and prior to acceptance, the QSR performed testing in accordance with the current Pipeline Operating Agreement. The JP-4 passed all tests, except copper strip corrosion. The tank was then resampled and tested, yielding the same results. Retesting of the refinery sample again produced passing test results. The fuel ultimately was rejected by the QSR. The pipeline company accepted responsibility for replacing the 40,000 barrels of contaminated JP-4 with product meeting the required specifications. The pipeline company emptied and cleaned its storage tank and replaced the cargo gallon-for-gallon. The alertness, knowledge of proper procedures, and decisive action by the QSR prevented the U.S. government from accepting unsatisfactory product and recovered fuel valued at an estimated $1.26 million.

In another incident, the QSR at DFSP Cincinnati identified repeated JP-4 barge shipments as being contaminated with particulate matter arriving from the source refinery. After several rejections and waivers of barge receipts, the QSR became concerned about the recurring contamination problem. The refinery QAR had certified the barges were clean prior to loading. A complete review of all quality procedures was conducted but provided no clue to the source of the problem. Further investigation by both DFR and DFSC quality personnel resulted in a long-time employee (Mr. Dan Hickman) recalling a similar problem years earlier. His theory proved to be correct. Refinery personnel were using the barge clean-out line for loading of JP-4. This same line was then reinserting the evacuated heavy rust into the barge during loading. Upon verification of this suspicion, the loading problem was corrected immediately by the refinery. Thanks to Mr. Hickman's experience and excellent memory, this problem was resolved after a long period of frustration.

Also at DFSP Cincinnati the QSR was tasked to assist the DFSC contracting officer with defaulting of the terminal contractor. This was necessitated by the contractor's failure to comply with provisions of the contract. Because of the close coordination between the DFSC contracting officer and DFR personnel, the transition from one contractor to another was processed smoothly, with no interruption of JP-4 and JP-5 fuel supply to supported activities.

These few examples demonstrate the variety of tasks and challenges faced in 1 month by selected quality surveillance personnel in DFSC. They are actual events and could have occurred in other locations throughout the world. QSR efforts, although varied and at times unusual, are focused on providing quality petroleum products.



ENGINEERING DESIGNS FOR TODAY AND TOMORROW

by Don Abeln, Engineer

Have you ever wondered how the various construction projects evolve to maintain the DFSPs in good working condition?

A significant engineering effort focuses on GOCO (government-owned, contractor-operated) fuel storage terminals managed by DFSC. In the DFRs that have GOCOs, a regional engineer is assigned responsibility for developing and managing programs for maintenance, repair, minor construction, and military construction (MILCON) projects. These construction projects are then coordinated with the Facilities Management Directorate at DFSC for further evaluation, prioritization, and budgeting.

This process results in the DFSC Facilities Engineering Annual Work Plan, published once each year. When a project is approved for design, DFSC submits the appropriate documents to the authorized construction agent. When complete, the construction phase follows, consistent with priority and funding.

The Army Corps of Engineers (COE) and the Naval Facilities Engineering Command (NAVFAC) are assigned construction agent responsibilities by Defense Directive. These agencies act as the construction agents for DFSC-managed facilities.

The design and construction efforts by the designated agent are reviewed continually by engineers at DFSC and the respective DFR. The regional engineer, through site visits to the terminal, inspects ongoing construction with the construction agent. This ensures that the requirements are met before acceptance.

Projects at the terminals vary. DFR-Central projects have included docking facilities, roads, buildings, manifolds, tank repairs, vapor recovery systems, cathodic protection, fire protection, pump stations, pipelines, emergency generators, truck-loading racks, rail-loading racks, and others. Currently the projects under construction or in the planning stages include: MILCON—$5 million; maintenance and repair—$3.83 million; and minor construction—$1.1 million.

For example, by 1988 the DFSPs at Cincinnati, Grand Forks, and Escanaba will have operational automatic fire suppression systems at a cost approximating $2.29 million.

These systems sense heat and dispense foam through piping systems to smother the fire source at critical locations in the facility. Interestingly, the system at DFSP Escanaba presented an unusual challenge because of the non-availability of a local water supply. This was resolved by using water from Lake Michigan. All others will use water supplied by the local utility systems.

Another project involved the construction of a floating barge fuel dock at DFSP Cincinnati on the Ohio River. The 26-year-old facility it replaced was unsafe, outmoded, and obsolete. The new facility incorporates state-of-the-art technology and will support the fuels distribution mission for many years to come.

The dock measures 25 feet by 90 feet and is secured by guide tracks on 24-foot diameter mooring cells at each end. This feature allows the dock to rise and fall automatically with the river. The old dock had to be manually attended to adjust mooring lines as required by changing river conditions. In addition, there are two mooring cells, one upstream and one downstream, to provide safety to personnel while mooring fuel barges.

The facility also has two 8-inch marine unloading arms, which can unload two barges simultaneously at a rate of 2000 barrels-per-hour. This project provides increased efficiency and safety for river operations at DFSP Cincinnati.

Quality Assurance and Quality Surveillance

by Bill Hendricks and Dan Hickman, DFSC Directorate of Quality Assurance and Technical Services

QUALITY ASSURANCE

Contract quality assurance for DFSC contracts includes all those actions taken by petroleum quality assurance representatives to make sure that contractors fulfill their contractual requirements prior to acceptance of the product by the government. While the place of acceptance may vary (free on board (f.o.b.) destination/origin shipments), most quality assurance actions for bulk fuels take place at refineries.

It is basic DFSC policy that contractors are responsible for controlling the quality of the petroleum product which they offer to the government for acceptance. DFSC, however, recognizes its own responsibility for assuring that offered petroleum products do in fact conform to contract requirements. Thus, it may be fairly stated that our responsibility for quality assurance is carried out as surveillance of the contractor's quality control system or program.

The significance of quality assurance cannot be overemphasized. Product acceptance—the final act of quality assurance—says in effect that the contractor has given us what we asked for. Excluding latent defects, fraud, or warranty provisions, acceptance is binding upon the government.

Procurement quality assurance consists of the following five categories of duties which are carried out by the quality assurance representative (QAR) at the refinery/plant level: concepts and planning, procedures review, procedures evaluation, product verification/inspection, and corrective action. The degree to which the individual QAR performs these functions, to a large extent, determines whether or not a contractor will *consistently* deliver products which meet *all* contract requirements. The QAR must monitor the contractor's quality system from receipt of crude charge stock until delivery to either government-furnished transportation (f.o.b. origin), or an installation (f.o.b. destination). The QAR monitors the system as it pertains to: receiving (both product and additives); blending and compounding (fuels, lube oils, greases); sampling; testing; storage; loading and shipping; quantity measurements; packaging, packing, and marking; records and reports; and calibration of equipment.

QUALITY SURVEILLANCE

Quality surveillance on DFSC bulk petroleum contracts encompasses those actions taken by petroleum quality representatives to ensure that the quality of government-owned product is maintained and is suitable for issue. Included in the surveillance are products at government-owned, contractor-operated and contractor-owned, contractor-operated terminals and in pipelines. Also included are actions related to inventory management, facilities management/maintenance, and storage at government-owned, contractor-operated terminals.

Quality surveillance begins upon receipt of the product by the government and continues as long as the product is in the physical possession of the holding activity, or until used. As the term surveillance implies, close observation is maintained to protect quality and quantity. To do this, periodic measurements and tests are made to detect possible degradation of the product or loss of quantity in storage, during shipment from the original supplier, or during subsequent movements until it reaches the end user and is consumed. It is a continual process performed by qualified and experienced personnel who are trained to detect deterioration trends by comparing periodic test data with the use limits of the product.

If the tests indicate a fuel has reached or exceeded the end use limits, arrangements are made for blending the materiel with good stocks or downgrading it to a lower type fuel. Fuels nearing the maximum use limits are scheduled for early use. This may involve moving the fuel from dormant storage to an active location where it can be promptly used.

Adjustments are made to the sampling and testing schedule for dormant storage stocks as deterioration trends for the various products change. Keeping aware of the changes associated with receiving, storing, handling, shipping, and using of various fuels is a vital part of effective quality surveillance.

The duties and responsibilities placed on the quality representatives performing contract quality assurance and surveillance at major refineries and terminals are some of the most complex, demanding, and to a great extent, unheralded in government service. Quality representatives must be able to successfully work with people of all backgrounds, ranging from tugboat deck hands to corporation presidents, from privates to generals, and all in-between. The quality representatives must be a combination of many things. They are experts in petroleum transportation, refining, and storage operations. They must be fully capable of serving not only as quality specialists, contract administrators, and contracting officers' representatives, but as public relations experts who can deal with people from all walks of life, nationalities, and cultures.

To the vast majority of people, the quality representatives they come in contact with *are* the government. Therefore, the ability to use good judgment and common sense separates the average from the exceptional—and its price is immeasurable.

The Work of the Military Petroleum Offices

> "Each of the military departments will maintain a petroleum organization to perform the management functions for products which are owned by the military departments and for procedural dealings as specified in this manual."
>
> *Procedures for the Management of Petroleum Products*

This excerpt is a succinct description of the work done by the three military petroleum offices. Two of these activities, the Aerospace Fuels Petroleum Supply Office (Detachment 29) and the Navy Petroleum Office, are housed in the same building as DFSC at Cameron Station, Alexandria, Va. The Army element, U.S. Army General Materiel and Petroleum Activity (USAGMPA), is based at New Cumberland Army Depot, Pa.

Although a service petroleum office performs many fuel functions specifically for its parent military service, it also maintains a crucial interface with DFSC, collecting requirements and inventory information from field elements to make sure fuel is properly and sufficiently supplied and maintained. In short, each office serves as a central point for coordinating petroleum needs.

U.S. Army General Materiel and Petroleum Activity

USAGMPA was established in 1971 under the Army Materiel Command to serve as the Army's link between its field activities and the Defense Logistics Agency/General Services Administration. One entire division, consisting of a Fuels Management Branch, a Technical Support Branch, and two petroleum field offices, is devoted to fuels management.

The activity's fuel role can be categorized into three functional areas: supply, technical support, and laboratory testing.

The Fuels Management Branch submits all Army peacetime and war reserve bulk fuel requirements to DFSC for procurement. These requirements are predicated on past usage and on what activities project they will consume. USAGMPA personnel also review contracts awarded by DFSC to make sure all requirements are covered and assist consumers with delivery problems and contract administration. This branch also oversees the Army Aviation Identaplate Program. These Identaplates are issued to Army activities throughout the world to be used by aircraft operators refueling away from their home station.

As its name suggests, the Technical Support Branch provides assistance to Army elements that are experiencing fuel and petroleum equipment problems. This division also manages the Army coal assistance program, including handling, accountability, and compliance with environmental standards.

Also falling under the control of the Technical Support Branch is the Army Quality Surveillance Program. Among other duties, personnel in this branch provide the Army's position on proposed waivers to requirements on DFSC contracts. Technical engineering assistance, including reviewing facilities construction plans and recommending improvements, is also available.

USAGMPA runs two laboratories to test bulk fuels (and packaged products). One is located at New Cumberland and contains equipment for spectrometric oil analyses. The other is at Defense Depot Tracy in Lathrop, Calif. The labs are used for quality surveillance testing for contractor deliveries and for Army stocks to determine compliance with specifications and suitability for use. Laboratory testing is also done to support the Army's Oil Analysis Program which uses oil samples from aircraft and ground vehicles to determine unusual wear trends on machinery components.

TELEPHONE NUMBERS

Autovon: 977-XXXX
Commercial: (717) 782-XXXX
Fuel Requirements: 6886/6758/7247
Army Coal Program: 6445
Aviation Identaplates: 6886
Petroleum Field Office East: 6511
Petroleum Field Office West:
Autovon: 462-9515
Commercial: (209) 835-0800, extension 515

Aerospace Fuels Petroleum Supply Office (Detachment 29)

Although its roots reach back to 1955, Detachment 29 was not formally established at Cameron Station until 1966 when it was decided that colocating an office with DFSC would result in better support of the Air Force's fuels mission. The detachment is aligned with the Air Force Logistics Command at Wright-Patterson Air Force Base, Ohio, and is one of five elements of the Directorate of Energy Management, Air Logistics Center, Kelly Air Force Base, Texas.

Detachment 29 manages Air Force fuels to get "the right fuel in the right place at the right time in the right quantities." The office services over 150 Air Force bases worldwide, handling over 5 billion gallons of fuel annually.

To carry out its mission, Detachment 29 has two branches: the Requirements and Distribution Branch identifies retail fuel requirements; the Logistics Management Branch monitors worldwide retail fuel elements. These branches concentrate on six major activities:

The Requirements and Distribution Branch coordinates with Air Force activities to determine requirements for aviation and ground fuels worldwide. These needs are then forwarded to DFSC via a Military Interdepartmental Purchase Request (MIPR) for procurement. For aviation fuel, the detachment first determines requirements for all continental United States bases and then coordinates them with the Major Commands (MAJCOMs). Overseas requirements are compiled by the respective MAJCOM and submitted to the detachment on Air Force Form 62. The MIPR is subsequently submitted to DFSC which awards a contract to fulfill the requirements. The appropriate DFSC Defense Fuel Region (DFR) will then write a Source Identification and Ordering Authorization (SIOATH) and send it to the base so fuel can be delivered.

The process is slightly different for procuring ground fuels. DFSC provides computer printouts to Detachment 29 which in turn forwards them to the bases. Each base completes the printout and forwards it to its MAJCOM which returns it to the detachment. These requirements are then submitted to DFSC and contracts are awarded. Bases receive a copy of the contract and fuel is delivered directly to them.

The Requirements and Distribution Branch also oversees into-plane contracts which enable military planes to receive fuel at commercial airports at reduced prices. Before an into-plane request can be submitted to DFSC, two requirements must be met: over 15,000 gallons of fuel must have been issued in a year on Form 15s (which are used for market-priced fuels) at a specified location, and the MAJCOM must approve of a contract being issued to meet these fuel requirements. (If no bids are submitted for an into-plane location, or if the bids are unacceptable, Air Force activities continue to purchase fuel on Form 15s.)

The Logistics Management Branch of Detachment 29 is charged with establishing and managing worldwide fuel levels. Both peacetime stockage objectives and pre-positioned wartime reserve materiel stockage are monitored to make sure that peacetime activities can be supported and that wartime readiness is consistent. These storage levels are documented and published in the "Fuels Logistical Area Summary." This annual document covers information for both aviation and ground fuels.

Another publication used by the detachment to monitor fuel levels is the Inventory Management Plan (IMP). The IMP, which is published by DFSC, lists all DFSC stock held for all branches of the services in terminals around the globe. It is used to manage fuel stock in the wholesale system.

Both branches within the detachment are involved in overseeing inventories, including those for aviation and ground fuels.

The fourth responsibility of the Air Force office is to gather and analyze data to improve Air Force fuel management. The detachment is using three microcomputers extensively to improve forecasting, procurement, and monitoring.

Training, another responsibility of the detachment, consists of two major programs for fuels personnel. One is a unique training opportunity for a top fuels non-commissioned officer to spend 2 years working with the detachment to become oriented to the wholesale management of fuel. The five reservists who are attached to the office to supplement personnel in wartime also receive training in Air Force fuels management periodically throughout the year.

Detachment 29 serves as the liaison with many Defense Department organizations, coordinating and working with information from the individual bases as well as needs from the Air Staff.

TELEPHONE NUMBERS

Autovon: 284-XXXX
Commercial: (202) 274-XXXX
Requirements and Distribution Branch: 7136
Logistics Management Branch: 7301

Navy Petroleum Office

The Navy Fuel Supply Office was established in August 1952 and was renamed the Navy Petroleum Office in 1973 to reflect involvement in the technical direction of petroleum programs within the Navy.

The office's prime mission is to provide direction and assistance Navy-wide to fleet and shore activities concerning fuel supply, quality, laboratory capabilities, technical specifications, facility construction, and related matters.

The office is composed of four divisions which help carry out that mission. In the Administrative Services Division personnel prepare documents on the Navy's bulk pre-positioned war reserve materiel requirements and the empty drum war reserve requirements computation, and oversee the petroleum officer trainee program. The Requirements Division collects and combines Navy petroleum needs, administers U.S. Navy-to-foreign navy fuel exchange agreements, coordinates fuel deliveries, and places contracting requirements on DFSC. The Facilities

Division is concerned with equipment and structures at all Navy bulk fuel terminals (involving 46 million barrels of storage). This division also handles pollution control programs and barge overhaul and maintenance. The Operations Division assists Naval shipyards, air stations, and other activities with technical problems, monitors quality surveillance, decides on waivers for products not meeting Navy specifications, guides petroleum laboratories, and participates in the North Atlantic Treaty Organization Standardization Program.

The Navy Petroleum Office keeps in close contact with both DFSC and the Defense General Supply Center (the inventory control point for packaged petroleum products). As the Navy's central point of contact in meeting petroleum needs, the office accumulates bulk requirements for Navy activities worldwide, levies these requirements on DFSC, and subsequently monitors worldwide consumption.

Distributing petroleum products to the operating forces at sea follows this same basic outline. The Military Sealift Command is tasked by DFSC to lift a specific cargo from a refinery and transport it to one of the bulk petroleum storage depots. The product is then held there until it is needed. In most cases, a shuttle transport is used to move the products to the battle group. There, through consolidation operations, the fuel is transferred to the on-station mobile logistics support force multi-cargo vessels. These then supply the individual battle group ships as needed.

The Navy Petroleum Office is currently working on several important projects to improve fuel operations and handling. Its facilities modernization plan is focused to protect the Navy's $3 billion investment in storage, pumping, transmission, and pierside facilities. One such major project is the pier construction at Long Beach, Calif. The office believes that since the Defense Logistics Agency now has more funding responsibility to improve bulk storage and handling systems, the outlook for more modern facilities is encouraging.

In the fuel conservation area, the Navy Petroleum Office has established plants at Navy supply terminals to process or clean off-specification and contaminated fuel which has been turned in, and is also researching other alternatives, including re-refining of reclaimed fuel oil. Annually, about 19 million gallons of waste petroleum is generated by 325 Naval activities. The Navy routinely reclaims 15.5 million gallons per year, blending a good portion of this into lower cost fuel or selling it as fuel oil reclaimed. The office expects that converting reclaimed oil into F-76 will replace up to 4 percent of commercially provided F-76 fuel. This is expected to result in net savings of $10 million per year.

One of the most important services the office provides is that of its technical assistance team. The team, usually made up of an engineer and an operations specialist, is designed to provide immediate, expert technical assistance to resolve fuel-related problems at any Navy command in the world. These visits are made at the request of activities and the goal is to help, rather than inspect. (Personnel from the Navy Petroleum Office, do, however, assist in inspector general and other team visits to evaluate fuel facilities worldwide.)

The Navy office is also publishing two "easy-to-use" petroleum operations manuals: one for use afloat and one for use ashore. These manuals will provide basic guidance for the Navy user, referring sailors to other source documents as required. The need for such publications has been recognized by both Navy commanders-in-chief and by teams on technical assistance and inspection visits.

TELEPHONE NUMBERS

Autovon: 284-XXXX
Commercial: (202) 274-XXXX
Planning and Administration: 7480
Requirements Division: 7485
Operations Division: 7491
Facilities Division: 7491

Up the Chain

The Defense Logistics Agency

DFSC is one of 25 primary level field activities of the Defense Logistics Agency (DLA), which has its headquarters at Cameron Station, Alexandria, Va. These field activities consist of four main groupings: supply centers, depots, service centers, and contract administration services regions. The six supply centers each manage a particular category of materiel: construction, electronics, general supplies, industrial, personnel support items—and fuel. The four depots receive, store, and issue materiel. The six service centers each provide a specific logistics or support service, such as maintaining defense technical information or reutilizing and marketing materiel. The contract administration services regions administer contracts which have been awarded by the military services, DLA, other federal agencies, state and city governments, and certain foreign governments. These primary level field activities have headquarters in 13 different states, but their responsibilities extend around the globe.

DLA's mission is to provide effective logistics support in the areas of contracting, supply, contract administration, and technical assistance to all the military services and to federal civil agencies and foreign governments as assigned. The other essential component of this mission is to provide this support at the lowest feasible cost to the taxpayer.

Through its six supply centers, over 2.4 million consumable items—everything from nuts and bolts and clothing and medicine to fuel and microelectronic products—are managed for the armed services. Each year DLA buys more than $15 billion worth of consumable items through the centers in Ohio, Pennsylvania, and Virginia. The items they manage account for 54 percent of all national stock numbers and 65 percent of all consumable items or repair parts in the Defense Department inventory.

Personnel at the centers process over 29 million requisitions annually and initiate over 5,000 contract items each day.

Rapidly growing in importance is the Weapon Systems Support Program.

DLA helps plan and then purchases over 469,000 items and components for more than 507 major weapons systems.

These systems range from the Navy's Poseidon submarine and the Army's Cobra helicopter to the Air Force's B-1B bomber. More than one-third of these requisitions are high priority, with materiel on its way to the customer within 3 days after DLA receives the order.

Some 400,000 military users depend on DLA, which ships more than 17 million items each year through a worldwide complex of depots, storage facilities, and fuel terminals.

The essential link in this supply chain is some 20,000 U.S. manufacturers and suppliers who contract with DLA and other Defense Department elements to provide needed materiel and services. About half of DLA's contracts go to small businesses, which provide the agency with more than $6 billion worth of goods and services annually. More than 80 percent of these contracts are awarded competitively to the lowest bidder.

Contract administration, with its particular emphasis on quality assurance, is another part of DLA's multifaceted mission. The primary elements of this mission are to make sure the contractor complies with the terms of the contract, accept products on behalf of the government, and pay the contractor. Before a contract is awarded, preaward surveys are performed to determine the contractor's capability to carry out the contract and a cost evaluation of the proposals is made. After a contract has been awarded, it is assigned to one of DLA's regions for administration.

DLA is headed by a three-star military officer who is supported by two deputies. Positions rotate throughout the services. DLA operates under the direction of the assistant secretary of defense for acquisition and logistics and works closely with the chiefs of each of the military services, as well as the Joint Chiefs of Staff.

① Requirements Determination.

Customer activities and their SCP's work with DFSC to determine how much of each product will be needed – where– over the coming year.

② Procurement/Contracting.

DFSC awards contracts to commercial suppliers for future deliveries to meet requirements.

③ Identify & Authorize Sources.

DFSC/DFR's inform customers of support sources and authorize placement of orders against contracts – or requisitions to DFSP's.

④ Order/Requisition Fuel from DFSC Sources.

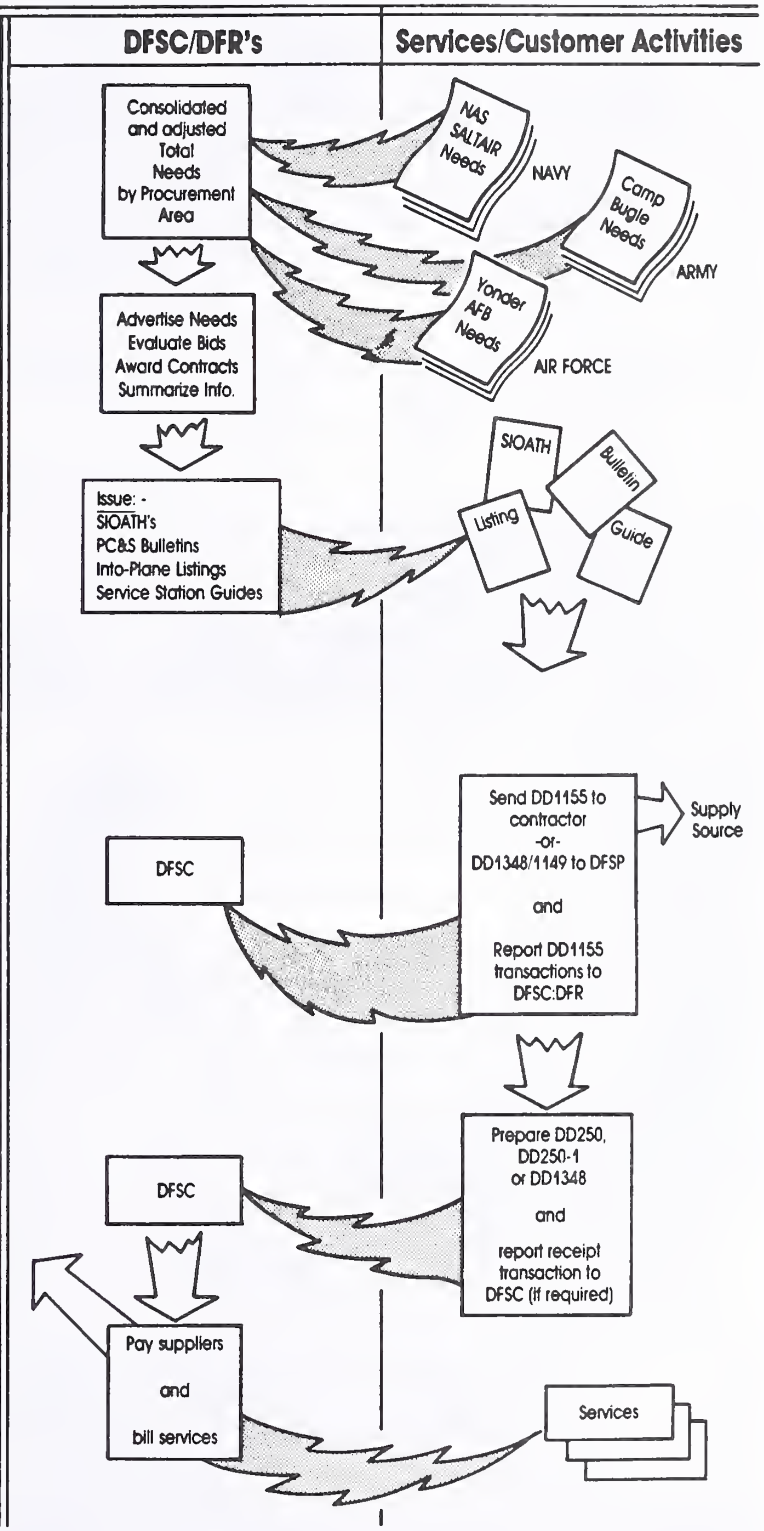
Customer places order (DD1155) against contract and (except for Air Force and all Overseas PC&S orders and into-Plane transactions) reports the transaction to DFSC – or – submits requisition (DD1348-1149) to DFSP.

⑤ Receive Fuel from DFSC Sources.

Customer receives fuel, documents receipt transaction and reports receipts from DFSC funded contracts and from DFSP's. (exception: receipts from DFSP's by Tank Car or Tank Truck and by dedicated pipeline are not reported to DFSC.)

⑥ Pay Supplier/Bill Services.

Defense Stock Fund pays suppliers for transactions under DFSC-funded programs and bills Services to reimburse the Fund.


DFSC/DFR's
Services/Customer Activities
Consolidated and adjusted Total Needs by Procurement Area
NAS SALTAIR Needs
NAVY
Camp Bugle Needs
ARMY
Yonder AFB Needs
AIR FORCE
Advertise Needs
Evaluate Bids
Award Contracts
Summarize Info.
Issue: -
SIOATH's
PC&S Bulletins
Into-Plane Listings
Service Station Guides
SIOATH
Bulletin
Listing
Guide
Send DD1155 to contractor -or- DD1348/1149 to DFSP and Report DD1155 transactions to DFSC:DFR
Supply Source
DFSC
Prepare DD250, DD250-1 or DD1348 and report receipt transaction to DFSC (if required)
DFSC
Pay suppliers and bill services
Services

The Defense Fuel Supply System

The defense fuel supply system is composed of a series of major functions which are shared between DFSC and the using activities of the military services and federal agencies. These functions can also be considered as steps in the cycle of fuel supply to the DFSC fuel consumer.

These six major functions or steps in the fuel supply cycle are graphically depicted in the accompanying flow chart which highlights the extensive interactions between DFSC and the using activities. Both parties, working together, are essential to successful fuel supply support to meet military operating needs.

DFSC SUPPLY SUPPORT PROGRAMS

A number of fuel supply support programs, or methods of supply, have been developed to provide flexibility in meeting the fuel supply requirements of DFSC's fuel consumers.

The following table identifies the major fuel support programs and shows the typical responsibilities of DFSC and the services for contracting and funding associated with each program.

Program	Contracting	Fund/ Pay Suppliers	Reimbursement
DFSP Support	DFSC	DFSC	Services reimburse the defense stock fund for fuel received
Direct Delivery	DFSC	DFSC	
Into-Plane Contracts	DFSC	DFSC	
Posts, Camps, and Stations			
• CONUS Army, Navy, Defense Logistics Agency	DFSC	DFSC	
• Air Force/ Overseas	DFSC	Service	
Bunkers	DFSC	Service	
Service Station	DFSC	Service	
Local Purchase	Service	Service	

The availability of several supply support programs permits activities to select the most reliable and least costly way of delivering each product to each delivery point.

The support program selected to meet any given requirement will often remain constant from year to year. Some changes in sources of product, however, occur each year and may cause a change in the support program used to meet a particular activity's requirement. In particular, shifts may occur between support of aviation or marine fuels from a DFSP and support of these products by direct delivery from a commercial supplier.

Most military activities require more than one fuel product. Consequently, many DFSC users will receive fuel from two or more supply support programs. The activity must, therefore, follow the procedures and reporting requirements associated with each of the supply programs from which it obtains support.

MAJOR NEW SYSTEM CHANGES

Direct Delivery Program—Centralized Ordering by DFRs for Users. In CONUS, all DFRs are linked to the computer at Cameron Station via terminals which allow them to input and receive DFAMS information. Under this new system, the consumer contacts the DFR and provides the information needed to prepare a delivery order (DD 1155). The DFR inputs required data to DFAMS resulting in automated preparation of the DD 1155 and simultaneous generation/input of the order transaction. The DD 1155 is forwarded to the contractor and a copy is provided to the consumer. The consumer is relieved of DD 1155 preparation, input of a P10 delivery order transaction to DFAMS, submission of on-order but undelivered reports, and maintenance of SIOATH control records (some services have chosen to retain some reporting requirements for their own purposes). In addition, DFAMS funds control and the timeliness of recording P10 delivery order (fund obligation) transactions have been improved with recording time reduced from 8.6 to 1.7 days. This concept has been tested by consumers supported by DFR-Southwest and is being evaluated for possible expansion to all CONUS activities.

DFSP Support Program—Requisitioning Product From a DFSP. Defense Department manual 4140.25-M procedures have been changed to include the following general rules for requisitioning product from a DFSP.

(1) Requisitions may be placed for single or multiple deliveries for not more than 1 calendar month.

(2) Requisitions may remain active and shipments made against the requisition until the total quantity is shipped or until an amendment is submitted by the user to decrease or cancel the unfilled balance.

(3) Consumers may amend requisitions to increase, decrease, or cancel requisition balances by submitting an amended requisition with new entries in the quantity field (23-29 of the DD 1348/1348-1; block 4E of the DD 1149) and a sequential amendment number (i.e., 01, 02, etc.) in 79-80 of the DD 1348/1348-1 or block 6 of the DD 1149. (Original requisitions will contain "00" in 79-80 of the DD 1348/1348-1 or block 6 of the 1149.) The amended quantity will be the *new total quantity required* under the requisition, including shipments already received.

(4) The DFSP will request cancellation of the undelivered quantities of the requisition when the remaining quantity is less than a resupply load quantity (tank truck/car) or when all multiple shipment suffix codes (A through Y plus 1 through 9) have been used by the DFSP to identify shipments already made against the requisition.

DFSC Support of PC&S Fuel Requirements. One of DFSC's missions is to arrange contract support for PC&S fuel requirements passed to DFSC by the services. Until early 1986, DFSC encouraged the services to locally procure PC&S requirements listed as pending in the contract bulletin. Following a thorough review of this procedure, DFSC has changed the contract bulletin clause to delete the automatic authority for local purchase of pending items. The Army and Air Force SCPs and Navy activities are advised to submit contract bulletin pending items to DFSC for procurement. DFSC will arrange contract support for these requirements using the small purchase procedures provided for in the Federal Acquisition Regulation (FAR). This action has been commonly referred to as "emergency fuel buys" and has been very successful in providing timely emergency support. In this connection, the SCPs/Navy activities are to submit only that portion of the pending item that is urgent or critical for continuing operations. DFSC then continues to obtain contract coverage for the balance of the pending item through normal procurement procedures as required by the FAR. As time passes if DFSC has not awarded a contract for a pending item, additional portions of the pending item may be procured as an emergency fuel buy when the SCP/Navy activity identifies the urgency and forwards the requirement for the item. This procedure is also applicable to new requirements that were not previously submitted to DFSC for procurement action and for items terminated from a fuel contract under default procedures. On 27 August 1986, DFSC forwarded a letter to the Army SCP to obtain concurrence/comments on emergency fuel buy procedures. DFSC will also coordinate with the Air Force SCP and Navy activities to standardize procedures.

DFSC CUSTOMER GUIDE

DFSC is preparing a *DFSC Customer Guide* for use at the military service installation level by personnel who are involved in obtaining fuel supply support from DFSC. One portion of the guide will contain a general section on how the overall defense fuel supply system works, descriptions of various DFSC supply support programs, an overview of DFAMS at the customer level, a summary of forms and documents used in the supply support program, and an assistance directory. Another section contains expanded general information and guidance on the most frequently used supply support programs: DFSP support, direct delivery, PC&S, and into-plane. Each program is described and information is provided on DFSC support notification, ordering/requisitioning, customer receiving, and billing/paying for fuel. Quizzes, with answers, are included in the guide to permit its use as a training device by the user and to assess how well personnel understand their support systems and their responsibilities.

The *DFSC Customer Guide* is being coordinated with the military services with distribution through service channels expected by December 1986.

DFSC CONSUMER ASSISTANCE

At times, users will need to contact DFSC to pose questions, clarify requirements or procedures, or obtain assistance in resolving problems relating to supply support. Contacts by consumers are encouraged as a way for DFSC and its users to work together more closely to achieve and maintain effective and timely fuel support.

Users needing information or assistance from DFSC have several channels available to them depending on the nature and urgency of the subject:

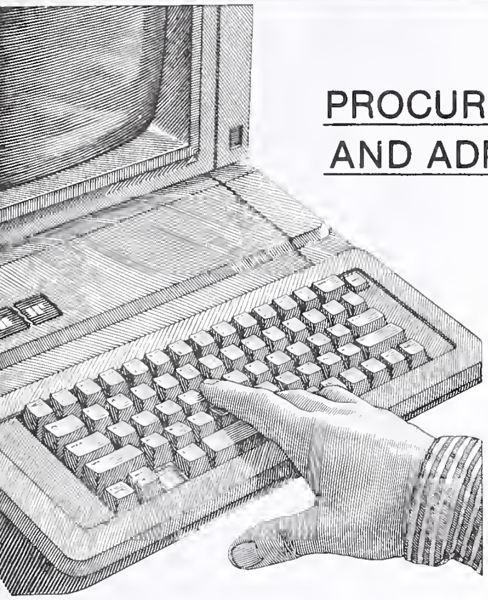
- Your SCP may require that you refer inquiries or problems to them first or at the same time you contact a DFSC representative.
- The DFRs are, for most bulk fuel consumers, a first line of DFSC consumer assistance. In CONUS, the DFRs provide help on matters involving bulk fuel transportation, storage, quality surveillance, and supply sources. Overseas DFRs are also responsible for quality assurance and limited contract administration functions.

DEFENSE SUPPLY ASSISTANCE CONTACT POINTS

Questions regarding supply assistance should be addressed initially to the DFRs if the matter falls within the scope of DFR responsibility. Other contact points within DFSC are provided here for your assistance. (Numbers shown are autovon numbers, the commercial prefix is (202) 274-XXXX.)

Subject	Contact DFR Initially?	DFSC Contact Point
• Direct Delivery Program (SIOATHs)	Yes	DFSC-OI/284-7512
• DFSP Support Program		
(quality/technical)	Yes (CONUS)	DFSC-QS/284-7010
(transportation)	Yes (CONUS)	DFSC-OT/284-7471
(SIOATHs)	Yes (CONUS)	DFSC-OI/284-7512
• DFAMS		
(procedures and general requirements)	Yes (CONUS)	DFSC-OP/284-7067
• Into-Plane		
(requirements, supply support)	No	DFSC-OI/284-7268
(contract administration)	No	DFSC-PRB/284-6996
• Posts, Camps, & Stations		
(requirements, bulletins, supply support)	No	DFSC-OI/284-7268
(contract administration)	No	DFSC-PRA/284-7461
• Bulk Fuel		
(requirements	No	DFSC-OI/284-7512
(contract administration)	No	DFSC-PZ/284-7453
• Service Station Program		
(bulletins)	No	DFSC-OI/284-7268
(contract administration)	No	DFSC-PRA/284-7461
• Transportation		
(except tankers)	Yes (CONUS)	DFSC-OT/284-7471
• Coal		
(requirements)	No	DFSC-PH/284-7413
(contract administration)	No	DFSC-PRB/284-4448
• Bunkers		
(requirements)	No	DFSC-OI/284-7268
(contract administration)	No	DFSC-PRB/284-4448
• Ocean Tankers		
(orders and schedules)	No	DFSC-OI/284-6721
• Bulk Lubricants		
(requirements)	No	DFSC-OI/284-7512
(contract administration)	No	DFSC-PRA/284-7461
• Alongside Refueling		
(requirements)	No	NAVPETOFF/284-7488
(contract administration)	No	DFSC-PRB/284-6195

If it is necessary, contact with DFSC can be made on a 24-hour/weekend/holiday basis by calling the DFSC duty officer: Autovon: 284-6696, Commercial: (202) 274-6696



PROCUREMENT DIRECTORATE ANALYSIS AND ADMINISTRATION

In our current environment of procurement reform and fiscal restraint, contracting professionals are being challenged to work as efficiently and effectively as possible. Within the DFSC Directorate of Contracting and Production, three support offices aim toward this goal. A brief description of each office follows:

a. Policy, Plans, and Systems Office

The Policy, Plans, and Systems Office develops, analyzes, and establishes procurement policies and computer support. The office consists of two branches: the Contract Policy, Plans, and Procedures Branch, and the Systems Branch.

Contract Policy, Plans, and Procedures Branch

This branch carries out federal government acquisition regulations and develops local policies and procedures. It provides procurement guidance and interpretation to all DFSC personnel.

The office also maintains clauses used in DFSC solicitations and contracts in an automated data bank accessible to all purchasing offices, develops and coordinates responses to Defense Department inquiries concerning procurement issues, and prepares requests for regulatory deviations and waivers. As part of its long-term work, it investigates and analyzes current contract methods and world market trends to develop better ways to carry out DFSC acquisitions. The office also provides the procurement perspective on broad logistical issues affecting the DFSC mission to other DFSC directorates.

Systems Branch

The Systems Branch carries out the implementation of the Defense Fuel Automated Management System (DFAMS) within the contracting directorate. DFAMS is an outgrowth of the 1973 expansion of the center's bulk fuels mission from procurement only to worldwide integrated supply management. It was conceived in 1975 in response to the need for a computer-assisted management information system capable of integrating complex and voluminous program information from all over the world. DFAMS development entails a "bottom-up" system design and analysis, the tailoring of system applications to meet the unique needs of each contracting division, debugging of system revisions, and system maintenance (including complete documentation). Once DFAMS is completely in place, every stage of the procurement process will be automated—from solicitation to evaluation and award, to maintenance of active contract data. The integrated design will allow data from each contracting phase to be fed into data files for successive stages, eliminating the need for rekeying of information. System-generated outputs will include solicitation schedules, recommended award patterns, award sheets, contract bulletins, distribution plans, electronic transmission of synopsis data, and management information system reports.

DFSC is currently operating with a combination of manual methods, various "stand-alone" automated systems, and the partially implemented DFAMS. Until the integrated DFAMS is fully in place, critical management information systems, including the price escalation system and the post-award information system, must be maintained by Systems Branch analysts. Many divisions have developed specialized microcomputer applications to carry out specific tasks.

To support this mixture of operations, the Systems Branch procurement analysts use their knowledge of both contracting and systems analysis to serve as a critical link between the user group and the development group. Users are the contracting specialists and administrators, who are actively involved in defining system requirements and capabilities. Developers are computer specialists in the DFSC Office of Telecommunications and Information Systems, who design the system's programs and make them work.

For major systems development, the procurement analyst must prepare a functional description which provides a basis of mutual understanding of system requirements and operation capability. As the systems are put in place, the Systems Branch analyst develops and maintains user manuals, trains and assists end users, researches and resolves systemic problems, and starts or reviews system change requests.

For users who wish to develop microcomputer applications, the Systems Branch can develop a preliminary system design, document desired system capabilities, and prepare formal requests for programming support.

Another critical function of the Systems Branch is the processing of contract data from the DD Form 350, the Individual Contracting Action Report. Systems Branch procurement assistants screen data for accuracy and completeness, investigate discrepancies, and clarify contract data reporting requirements for contracting divisions. Data is entered into the Defense Logistics Agency (DLA) contracting data base for summary reporting to the

Federal Procurement Data System, which disseminates official statistical data on federal contracting to the president, the Congress, the General Accounting Office, federal executive agencies, and the general public. Contract data is also entered into the DFSC Post-Award Information System for reporting to the DLA Integrated Resources Management System, which affects fundamental management decisions regarding manpower, funding, and resources.

Automation of procurement processes saves many manhours of effort, enables contracting personnel to perform more sophisticated analysis than would be possible using manual methods, and increases the accuracy and timeliness of management information reporting. All contracting personnel benefit through improved productivity, increased visibility as an efficient, effective workforce, and sound decisions based on complete, accurate data.

b. Competition and Pricing Office

The Competition and Pricing Office has two primary responsibilities: developing ways to increase competition, and analyzing price acceptability.

Competition Branch

The Competition Branch identifies items lacking in competition, reviews sole source justifications, and reduces restrictive terms and conditions to improve competition. Much of the branch's time is spent consulting government and commercial materials and publications and following up leads by telephone. Monitoring and reporting on DFSC competition progress is also involved.

Pricing Branch

The Pricing Branch conducts cost or price analyses on nearly all DFSC's buys. Price analysis involves the comparison of prices with other information furnished by the offeror or available from DFSC data, publications, and trade organizations. This differs from cost analysis which is based on the offeror's historical and projected costs. The Defense Contract Audit Agency conducts an audit of these costs which then serve as a basis for the cost analysis. In either case the end product is a recommendation of negotiation objectives or price acceptability. The Pricing Branch also works with small disadvantaged business procurements and reviews claims.

c. Operations Support Office

The Operations Support Office provides general administrative support for the procurement directorate. It is organized into two branches: the Administrative Services Branch and the Contracting Support Branch.

Administrative Services Branch

The Administrative Services Branch processes all personnel actions, such as awards and promotions for procurement employees; distributes registered and certified mail, procurement-related telegraphic messages, and contractual documents; and maintains a library of current procurement regulations. The branch also maintains all contract award files documenting procurement history on individual contracts.

Contracting Support Branch

The Contracting Support Branch is designated the custodian for receiving and documenting bids and offers in response to solicitations. The bid custodian arranges and conducts formal public openings where sealed bids are opened and disclosed to the public. The branch maintains the list of codes assigned to each bidder or offeror and manages the printing of solicitations, contracts, bulletins, and other documents. The branch also processes pre-contract award and post-award notices for publication in the *Commerce Business Daily*, the official publication for all government contracting.

THE BULK FUELS DIVISION

The Bulk Fuels Division is one of four buying divisions within the Directorate of Contracting and Production. The division is responsible for the purchase and contract management of various bulk petroleum products (such as jet fuels, gasolines, and diesel fuels) for essential worldwide U.S. military requirements. These requirements amount to approximately 169,000,000 barrels of product annually (that's over 7 billion gallons!) and were valued at $5.8 billion in 1985.

The task of buying these products and administering the resulting contracts is done by dividing the work (and the approximately 35 personnel) among four buying teams, all reporting to the division chief. Three of the four teams manage continental U.S. (CONUS) requirements and each conducts two major procurement programs per year. The fourth team manages overseas requirements, also accomplished in two major procurement programs.

What the Division Buys

The division has divided the world into four buying cycles to equalize the overall workload and insure ongoing contractual coverage.

a. Contracts for Western Pacific requirements are awarded each December for delivery 1 January through 31 December. This requirement is for U.S. military forces in such places as Hawaii, the Philippines, Japan, Korea, and the Indian and Pacific Oceans. Typically, the products purchased are JP-4 and JP-5 jet fuels, diesel fuels, gasolines, and bulk fuels for ships bunkering and power generation.

The Western Pacific purchase program normally totals about 26 million barrels a year and is valued at over $300 million this year, with about 10 to 15 contracts per year.

b. The second major procurement of the calendar year is contracts for U.S. East and Gulf Coast requirements. They are awarded each March for delivery 1 April through 31 March. These requirements are for JP-4 and JP-5 jet fuels, diesel fuels, and aviation gasoline for the U.S. East Coast and Gulf Coast (including Guantanamo Bay, Cuba, and Puerto Rico). The resulting 25 contracts are valued at approximately $1 billion for the 57 million barrels purchased.

c. The third major procurement each year is for Atlantic, European, and Mediterranean requirements. Contracts are awarded each June for delivery 1 July through 30 June.

Six to ten contractors supply jet fuel, diesel fuel, and gasoline to military users in Europe and U.S. Naval forces in the Atlantic and Mediterranean. Approximately 24 million barrels was bought this year with a value of $375,000,000. The European theater is currently undergoing a conversion from JP-4 to JP-8 jet fuels, as was done in the United Kingdom several years ago.

d. The fourth and final major procurement of the year is for U.S. inland and West Coast requirements. Contracts are awarded each September for delivery from 1 October through 30 September. This $1 billion program is for over 60 million barrels of jet fuels, gasolines, diesel fuels, and Navy special fuel oil. The 30 or more annual contracts are for both free on board (f.o.b.) origin and destination deliveries to the U.S. West Coast and inland installations in CONUS and Alaska.

These four major procurements and other supplemental and emergency buys result in the award of 100 to 130 contracts per year. The division performs "cradle-to-grave" contracting, which simply means it solicits and negotiates offers from the petroleum industry, evaluates the offers, awards contracts, then administers the contracts throughout their delivery periods, while the directorate's Production Division administers the contracts of the other DFSC buying divisions, after award.

The Bulk Fuels Procurement Cycle

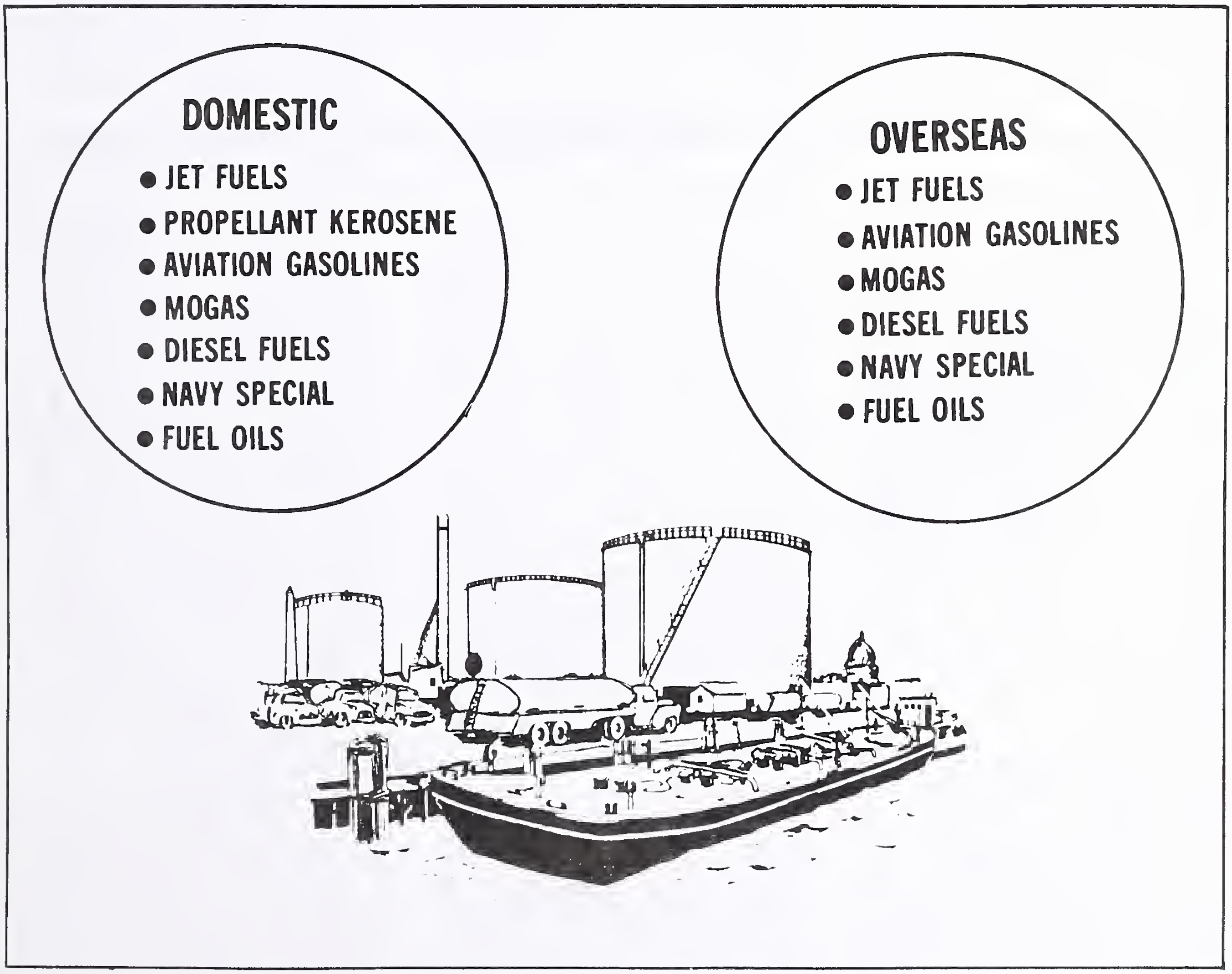
The procurement process actually begins 6 months prior to the contract award date. The entire process is very similar for each procurement, with each phase summarized as follows:

a. Requirements are transmitted from the requiring activities through their respective service to the division by DFSC's Directorate of Supply Operations 6 months prior to the beginning of the delivery period. While preparing the solicitation document, the division satisfies the procurement regulatory requirements of finalizing the bidder's mailing list, processing an advanced procurement plan, establishing and documenting rationale for small business set-aside quantities to be solicited, coordinating any small and disadvantaged 8(a) reserved quantities and contractors with the Small Business Administration, and giving industry advance notice of the solicitation by publishing a synopsis of the requirement in the *Commerce Business Daily*. The time period for this phase of the procurement process is approximately 1 month.

b. About 5 months before the beginning of the delivery period, the solicitation is mailed to as many as 400 prospective offerors. Regulations require a 30-day solicitation period, therefore the time and date established for receipt of offers will generally be 4 months before the beginning of the delivery period.

c. All of the division's contracts are awarded using negotiated, versus formally advertised, acquisition procedures. Therefore, upon receipt of initial offers, activities include performing price analyses, clarifying offers, identifying items to be negotiated, and formulating negotiation strategies. Most of this work is accomplished in a 1- or 2-week period following receipt of initial offers.

d. The negotiation period begins and ends on the same dates and at the same times for all offerors and lasts about 1 month. During negotiations, price is, of course, a major factor discussed. However, offerors frequently take exception to standard terms and conditions contained in the solicitation. Issues routinely requiring discussion are price



escalation terms, price ceiling clauses, product specifications, quality and quantity determination provisions, payment terms, supply commitments, and transportation charges. In some instances, these issues result from dynamic market forces affecting all suppliers, while in other cases, unique characteristics of individual refineries must be considered. Not only must issues be resolved and compromises agreed to under individual offers, but the division must also make sure than any compromise reached will not result in an unfair advantage, or disadvantage, when all offers are considered. Negotiations close about 2 months prior to the beginning of the delivery period.

e. In the remaining 2 months before the beginning of the delivery period, the division conducts 8(a) and small business set-aside negotiations, finalizes contract file and contract award documentation, and satisfies internal contract review requirements. However, the major effort at this time is evaluating offers. The division is responsible for finding the particular combination of awards which will fill the government's total requirement at the lowest laid-down (product plus transportation) cost. Although the total volume of fuel offered by all offerors has exceeded the total requirement in recent years, it is never possible to award contracts so that each individual requirement can be completely supplied from its least expensive source. Simple procedures such as awarding contracts to the lowest priced source, then to the second lowest source for any requirement unfilled by the lowest source, and so forth, do not provide the least total cost pattern of awards. Finding the overall "minimum cost solution" or distribution pattern, can only be done by using a linear computer bid evaluation model. Three categories of information are required to run this model: requirements information, offer information, and freight rates. Information needed to evaluate 55 offers to 190 using activities (including all required freight rates) amounts to over 7,700 separate data entries which must be identified, input, and verified. Upon completion of this effort, awards are made.

More About the Bulk Fuels Division

In addition to this normal workload, the division reacts to supplemental and emergency procurement requirements which can be caused by a shortage of coverage on a major solicitation; unanticipated, emergency, or increased requirements; the default of a contractor; or other reasons. To meet these requirements, it is not unusual for the division to process eight to ten more solicitations which result in the award of 20 to 30 additional contracts per year, division-wide.

In addition to everything else, the division has frequently been tasked with specialized requirements which involve significant departures from standard procedures. In 1981 the division developed a solicitation which allowed the exchange of Naval Petroleum Reserve crude oil for jet fuel in response to the Fuel Supply Assurance Program. In 1984, after efforts to secure storage for jet fuel in the Indian Ocean area failed, the division developed a solicitation providing for the purchase of commercial jet fuel and its storage on the open seas. Over the last 5 years the division has written contracts for specialty and experimental fuels, synthetic fuels, and fuels made from shale oil. More recently, it is increasingly involved in Foreign Military Sales transactions and in negotiating Memorandums of Understanding with foreign governments in support of U.S. exercises overseas.

THE GROUND FUELS DIVISION

The Ground Fuels Division obtains contract coverage for direct truck delivery, barge delivery, and f.o.b. origin delivery (government pick-up) of motor fuels, heating fuels, some aviation fuels, additives, and lubricants for the posts, camps, and stations fuel needs of over 5,000 military and civilian activities worldwide. The three buying branches support major purchase programs including the annual domestic regional programs in CONUS (8 regional programs plus the General Services Administration "Fuel Yard") and several major overseas programs along with numerous smaller programs, unique exercise requirements, emergencies, and Small Business Administration 8(a) set-aside programs.

The CONUS regional programs are solicited using sealed bidding procedures which require accurate identification and description of requirements, along with their timely submission. This permits a review of requirements so that items and their descriptions may be checked for accuracy and considered for reservation under the Small Business Administrative 8(a) contracting program.

Timely submission of requirements also allows for the accurate synopsis of the procurement in the *Commerce Business Daily*, a publication describing the product location and volumes, which is required by law to be published to stimulate competition. This synopsis, along with other referrals, helps to insure that the bidders' mailing list is up to date and includes all possible viable contractors.

We send potential contractors solictation packages, which include a contract form, contract clauses, the supply schedule (listing of items and a description of consumer requirements), contractor representation and certification forms, and price data sheets, by which the contractors provide their bids.

The solicitation specifies base reference price data and a petroleum industry pricing reference publication which indicates market fluctuations. Contractors bid with respect to the base reference price and when contracts are awarded (to the evaluated low bidder), prices are adjusted (up or down) as the market reference price moves. This economic price adjustment system insures that neither the government nor the contractors need to fear dramatic uncompensated or unsubstantiated changes in the price of petroleum. In other words, the low bidder is always low and the price he or she is paid fluctuates with the market. No profits or margins are guaranteed to the contractors, and it is up to the business and management skills of the contractors to remain competitive and profitable.

A typical region in the posts, camps, and stations program has from 250 to 500 companies on the bidders' mailing list and usually 100 to 200 contractors submit bids for the 600 to 1,400 different line items in a region. A line item consists of a specific type of fuel with a specific quantity for delivery to a specific location. Normally 80 to 150 contracts will be awarded for a regional program. Regional contract awards are combined into a contract bulletin which is issued to all using activities that have submitted requirements for fuel support. Each activity then places orders for its own fuels to the appropriate contractor listed in the bulletin.

In circumstances where no coverage (bid) was received, bid prices were unreasonable, or requirements were submitted late, we resolicit by a supplemental solicitation to obtain contract coverage. Since our regions average between 600 and 1,400 lines items each, with many of those items very small quantities or in remote locations, it is not unusual to require two or more "wrap-up" solicitations to obtain the maximum possible coverage. In addition, to assure continuing coverage, we will purchase small uncovered quantities and emergency requirements using small purchase procedures while wrap-up solicitations are being completed.

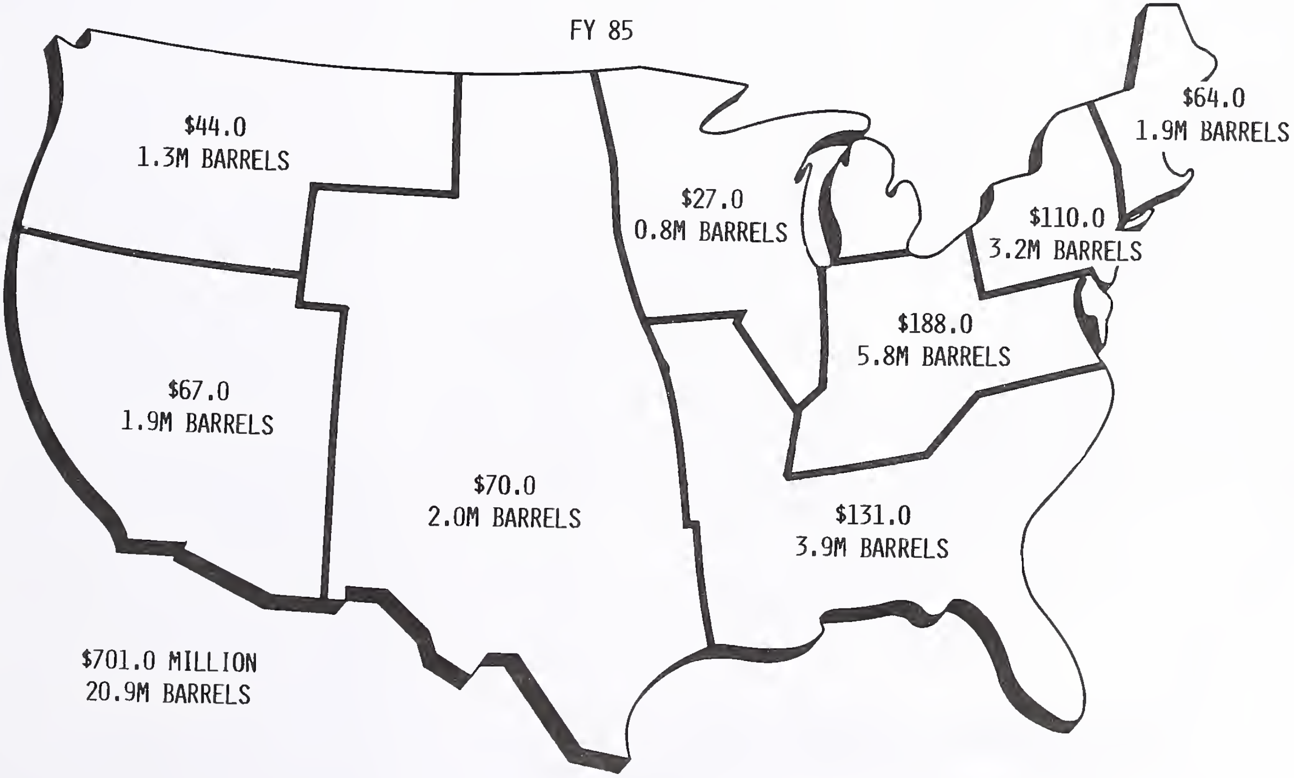
Overseas programs and 8(a) set-aside contracts are obtained using negotiation procedures. This method provides some flexibility when sources of supply are in doubt, or if there is possible disagreement over terms and conditions or specifications. There are far fewer contracts awarded in these programs. In these "other-than-bulletin" programs, individual contracts are provided to the using activities for use in placing orders for delivery of fuels.

We strive to have contracts awarded and bulletins issued to using activities for all programs 1 month prior to the beginning of the delivery period. Unfortunately, this is not always possible. Although it may appear that lead time between submission of requirements to DFSC by using activities and the subsequent award of contracts (and actual performance start date) is excessive, a considerable amount of time is required to comply with laws and regulations, (the Competition in Contracting Act, review and approval cycles, etc.). In addition, many situations can arise that will delay contract award, such as mistakes-in-bid by contractors, protests, and required preaward surveys of prospective contractors to determine their capability to perform.

To insure the best possible fuel support for each organization, ordering personnel should become totally familiar with the terms and conditions contained in the contract or contract bulletin, whichever is applicable. If an activity needs help in any area, there are contact points in various areas of DFSC that are listed in the contracts and bulletins. Give us a call.

The Ground Fuels Division takes pride in its strong track record of military consumer support. Historically, the 38 people who work with posts, camps, and stations contracts award approximately 86 percent of the contract line items completed by DFSC. This represents 15,909 line items, valued at nearly $1.05 billion. We typically award nearly 1,800 contracts to almost 1,000 contractors. This represents 69 percent of DFSC contracts awarded. Worldwide, activities of the Department of Defense and many federal/civil agencies are served through the efforts of the Ground Fuels Division. Continuous, economical, and timely support of fuel requirements requires a total team effort by numerous individuals in supply, quality assurance, administration, and ordering and paying offices as well as the requiring activities. We in Ground Fuels intend to continue to do our part.

DFSC PETROLEUM PROCUREMENT
GROUND FUELS DIVISION
DOMESTIC POSTS, CAMPS AND STATIONS
FY 85



SPECIALTY FUELS DIVISION

The Specialty Fuels Division oversees acquisition of into-plane petroleum products, bunker fuels, and their related services; specified bulk lubricating oils, aircraft engine oils, and fuel system icing inhibitor; and, in CONUS, Alaska, and the Federal Republic of Germany, various coal products.

Following is a brief summary of each program and procedures that will help DFSC ensure that each activity's needs are fulfilled.

Into-plane Purchase Program

The Into-plane Branch provides for the refueling of U.S. government aircraft at commercial airports worldwide. Although the primary user is the U.S. Air Force, support is also provided to the other U.S. military services, the National Aeronautics and Space Administration, the Federal Aviation Administration, and numerous other governmental agencies.

The basic into-plane support program provides a source of fuel and service for aircraft when support from military sources is not available. The program provides for an overall lower cost to the government and establishes standards for quality and safety in servicing consumer aircraft at commercial airports.

How does the program work? The military services and other U.S. government agencies submit their fuel requirements to DFSC for the commercial airport locations desired. Based upon those requirements, the Into-plane Branch prepares the necessary solicitations, receives offers, evaluates and negotiates them, and awards contracts to meet the requirements. Contracts are currently being awarded on a 1-year or multiyear basis. When service is required, air crews present their Identaplate (DD Form 1896 for jet fuels, DD Form 1897 for aviation gasoline) to the contractor. The contractor finishes the transaction by refueling the aircraft, completing the DD 1898 by processing the Identaplate through an imprinter, and submitting an invoice to DFSC with a copy of the DD 1898 signed by the pilot or authorized crewmember. DFSC then pays the contractor and bills the aircraft's home base or another specified account at the previously determined standard price.

Products and services provided include aviation gasoline, military turbine jet fuels (JP-4, JP-5), commercial jet fuel (ComJet A or ComJet A-1 for overseas), aircraft engine oils, defueling, and refueling of defueled product. Currently, into-plane contracts are in place at 217 commercial airport locations worldwide. Average sales in fiscal 1985 exceeded 2.6 million barrels of product, valued at over $126.3 million.

Bunkers Purchase Program

The responsibility of the Bunkers Branch is to provide ships' bunkers fuels for delivery to U.S. vessels or marine service stations worldwide. Although the U.S. Navy is the principal user, bunkers support is also provided to the Military Sealift Command, the U.S. Coast Guard, the U.S. Army Corps of Engineers, and many other government agencies.

The bunkers fuel support program improves operational flexibility by providing a source of fuel and related services for vessels at locations where other support is not available. The program also provides products at a lower cost than would otherwise be possible and establishes standards for product quality and the servicing of vessels at commercial ports.

As is the case with into-plane requirements, the military services and other government agencies submit their bunker requirements to DFSC and include commercial port locations, products, and estimated quantities desired. The division prepares solicitations (both requests for proposal (RFP) and invitations for bids (IFB)), receives offers or bids, evaluates them, negotiates when required, and makes contract awards for CONUS and overseas locations. Contract awards are for 1 year or for a multiyear timeframe. In CONUS, a bulletin with source information is provided to each requesting activity. (U.S. Navy activities overseas receive notices from the Navy Petroleum Office.) Additionally, local purchase authority is granted for one-time requirements, for those under 2,000 barrels annually, or where DFSC does not have a contract. The authorized ordering activities designate the paying source or agency.

Products supplied include Naval distillate fuel, Navy special fuel oil, fuel oils, and diesel fuels. Occasionally a small bunker requirement for lube oil exists overseas. Currently, bunker fuels support is available at 149 CONUS ports and 91 ports overseas. Contract awards issued in fiscal 1985 exceeded 2.8 million barrels of product valued at over $77.7 million.

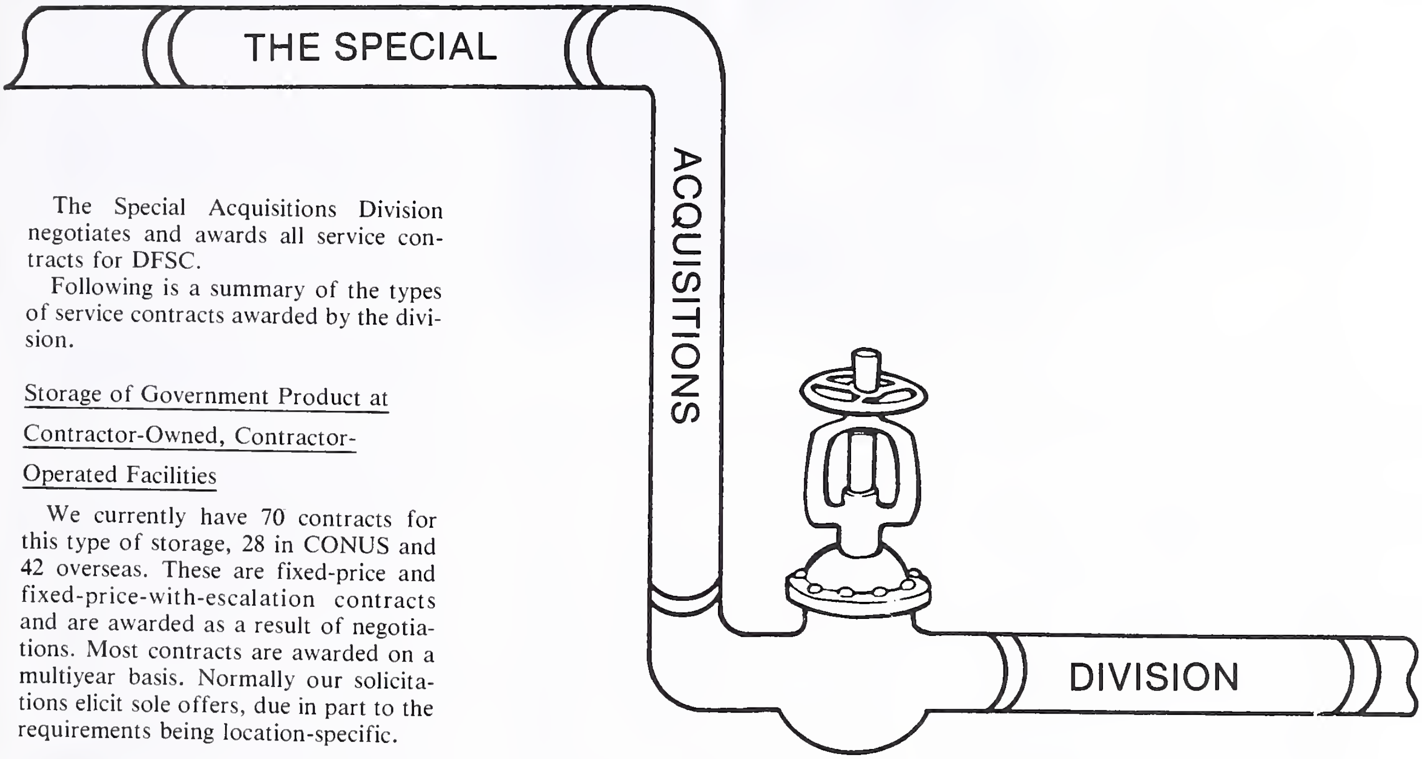
Bulk Lubes and Coal Purchase Programs

The responsibility of the Bulk Lubes and Coal Branch is twofold: first, to provide bulk lubricants for aircraft, vessels, and vehicles, and bulk fuel system icing inhibitor for turbine jet fuels; second, to acquire anthracite and bituminous coal. Products are procured for the military services, Defense Fuel Support Points, and other federal agencies in CONUS and overseas.

The military services and U.S. civil agencies submit their requirements to DFSC by providing product and quantity needs and desired delivery locations. The division prepares necessary solicitations, both RFPs and IFBs, receives offers or bids, evaluates them, negotiates when required, and awards contracts to satisfy the requirements. As is the case for into-plane and bunker contracts, lubes and coal contracts are also made on a 1-year or multiyear basis. Bidders are required to have their offered coal sampled and analyzed by the Department of Energy prior to submitting a bid. This provides some assurance that the coal offered will meet required specifications. Contracts are awarded and payments are made based upon an "as received British thermal unit basis."

Military installations and other federal agencies use coal to generate steam or hot water in central heat or power plants. DFSC procures coal from specific mines, many of which mechanically clean the raw coal in a preparation plant. This preparation makes the product more uniform and improves the quality of the coal being offered. Coal is also crushed, rescreened, and blended to produce special sizes for specific purposes. There are no federal or uniform specifications for coal. The required specifications are based upon the type of equipment in which the coal is used. The final responsibility for specifications rests with the consumer. Anthracite coal is purchased in stove, nut, and pea sizes; bituminous coal is used as a stoker product, measuring 1.25 inches by ¼ inch.

Bulk lubricant sales in fiscal 1985 exceeded 47,000 barrels, valued at over $5 million. Average annual sales of coal exceeded 1.3 million short tons, valued at over $105 million.



THE SPECIAL ACQUISITIONS DIVISION

The Special Acquisitions Division negotiates and awards all service contracts for DFSC.

Following is a summary of the types of service contracts awarded by the division.

Storage of Government Product at Contractor-Owned, Contractor-Operated Facilities

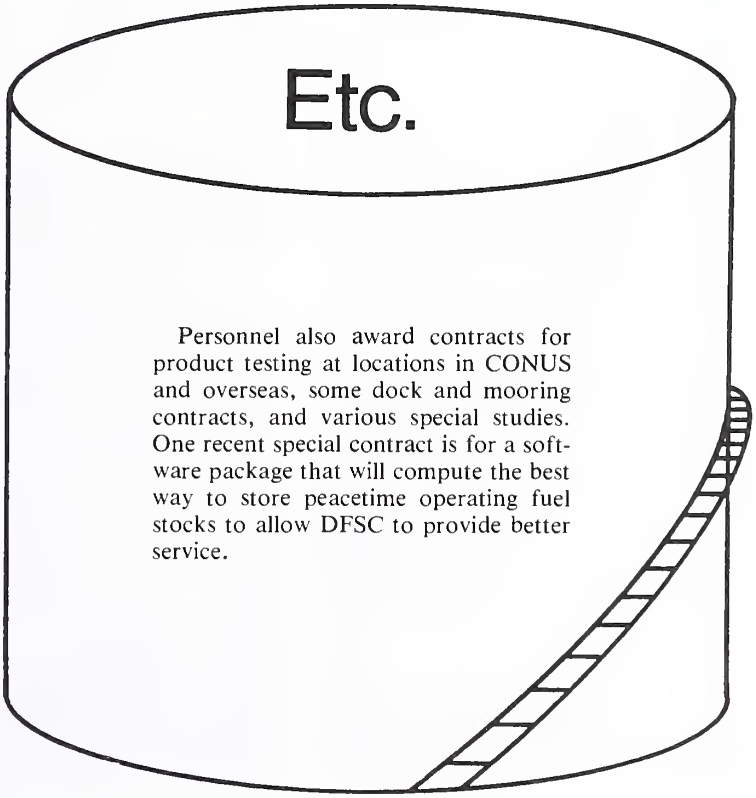
We currently have 70 contracts for this type of storage, 28 in CONUS and 42 overseas. These are fixed-price and fixed-price-with-escalation contracts and are awarded as a result of negotiations. Most contracts are awarded on a multiyear basis. Normally our solicitations elicit sole offers, due in part to the requirements being location-specific.

Storage of Government Product at Government-owned, Contractor-Operated Facilities

There are 18 such fuel terminals under DFSC's responsibility. The contracts awarded for these services are usually multiyear, fixed-price ones with cost provisions for certain minor maintenance and repair items. The solicitations for these services are usually negotiated on a competitive basis.

Alongside Aircraft Refueling

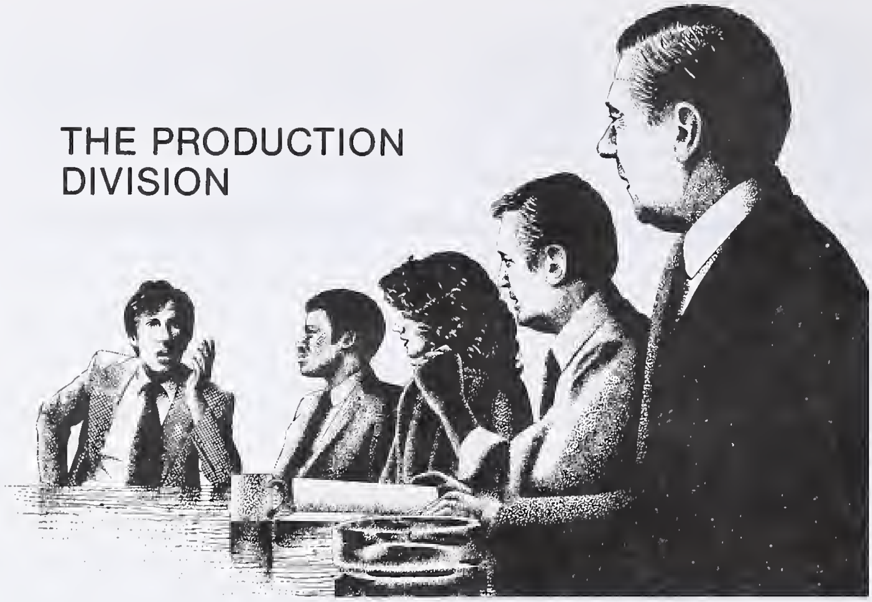
The office also arranges alongside aircraft fuel delivery service at 28 U.S. Naval Air Stations and one Army Air Field. The service entails the contractor furnishing the necessary equipment, personnel, and supplies to deliver government-owned petroleum from on-base storage to military aircraft. These contracts have historically been let as a result of negotiations. Normally our solicitations elicit sole offers due to the high initial start-up costs for equipment. Currently five companies control all 29 installations.



Etc.

Personnel also award contracts for product testing at locations in CONUS and overseas, some dock and mooring contracts, and various special studies. One recent special contract is for a software package that will compute the best way to store peacetime operating fuel stocks to allow DFSC to provide better service.

THE PRODUCTION DIVISION



The Production Division administers most of the contracts awarded by DFSC. Two branches handle the administration effort: the Ground Fuels Post-Award Branch, which administers contracts for gasoline, heating oil, diesel fuel, residuals, bulk lubricants, and the credit card program. The other branch is the Services/Specialty Fuels Post-Award Branch, which administers contracts for coal, into-plane refueling, alongside aircraft refueling, bunkers, and storage.

Following is a brief summary of each program and procedures that will help DFSC ensure that you, the consumer, receive your product:

Posts, Camps, and Stations

(Ground Fuels)

The domestic posts, camps, and stations program provides ground fuels (gasoline, diesel oil, heating fuel, and residuals) for over 5,000 Department of Defense and federal civilian agencies throughout CONUS, Alaska, Hawaii, and Puerto Rico. These contracts are awarded on an annual basis, with the prices changed weekly to reflect market conditions. Army, Navy, and defense agency (DLA, Defense Nuclear Agency, etc.) activities should not concern themselves with the current product price. Since you are part of the single point payment program you are billed the standard (stock fund price) throughout the year. A discussion of the standard price is presented in another section of this *FUEL LINE*.

For Air Force and federal civilian agencies, your payment offices receive weekly price change supplements automatically. These supplements are issued in sufficient time to permit payment of invoices 30 days after receipt in accordance with the provisions of the Prompt Payment Act. If the information must be received earlier, you may call autovon 284-7460, or (202) 274-7460 after Wednesday and receive the current week's prices.

Each year, nearly 1 billion gallons of fuel is delivered to consumers under this program. With deliveries normally occurring by truck in quantities of 8,000 gallons or less, it is evident that there are literally tens of thousands of deliveries made each year. Occasionally, problems occur. These problems are primarily either non-delivery or delivery of off-specification product. If this should happen to you, this is what you should do:

First, contact any of the administrative contracting officers (ACO) in the branch at autovon 284-7461; the commercial number is (202) 274-7461.

Second, be sure to follow the instructions in the bulletin.

If a contractor fails to make timely delivery, the contract bulletin contains instructions for default procedures. Due to the legal nature of a contract default, these procedures must be followed explicitly. The DFSC ACO may terminate the delivery orders first, then, if deemed appropriate, the item, and eventually the contract, if the non-delivery persists. Keep in mind that DFSC will keep you supplied during non-deliveries. Emergency requirements should be made known to the branch.

When delivery of off-specification product is suspected, the product should be tested. It is important that correct sampling procedures be followed, since the activity must send a sample to its laboratory, which, in turn, sends a copy of the test results to the DFSC Directorate of Quality Assurance and Technical Services. Based on the directorate's recommendation, the contractor is notified of the problem and immediate claim action may be taken. Further off-specification deliveries of the same item by the same contractor may result in additional claims, and, if merited, termination of the item for default.

Coal

DFSC provides coal at over 50 domestic locations. We supply coal for Army, Navy, Air Force, and Marine Corps installations as well as coal to heat federal buildings in Washington, D.C., and federal prisons in several states. Coal contracts are requirements contracts with no obligation on the part of the government to lift the entire contract quantity. Coal is not stockpiled by the contractor but must be mined, processed, and delivered after a delivery order is placed. The delivery order is most important. It must have a quantity and delivery period clearly specified.

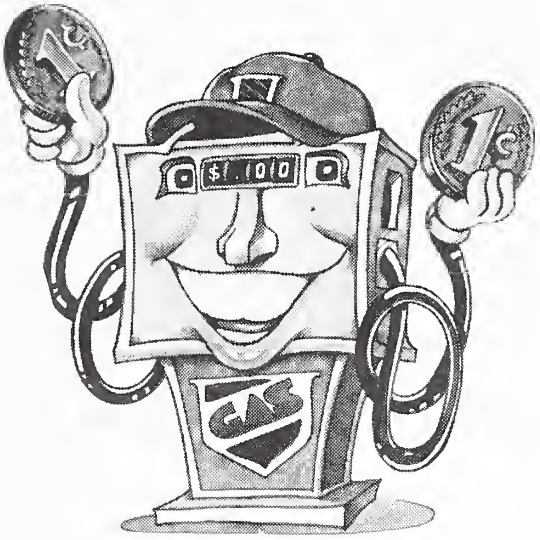
Delivery orders against coal contracts should be issued with a 2-week lead time prior to the requested start of delivery and should cover only a month-long performance period. This enables the contractor to start the delivery process and schedule a government quality assurance representative to witness the loading. Copies of each delivery order should be sent to the Ground Fuels Post-Award Branch to keep the ACO and contract administrators informed of the progress of each contractor. Contractor invoices are mailed directly to the activity for payment processing; care should be taken by the activity to ensure that timely payments are made to the contractor in accordance with the Prompt Payment Act.

In the event that a delivery of coal arrives without the required DD Form 250, the activity should not unload the coal, but should contact the branch immediately. If a contractor is not performing (or not making adequate progress) to enable timely completion of a delivery order, activities should notify their inventory control point (ICP) or the Ground Fuels Post-Award Branch immediately. The ICPs are:

For Army activities: U.S. Army General Materiel and Petroleum Activity, New Cumberland, Pa., Autovon 977-6053 or Commercial (717) 782-6053

For Marine Corps and Navy activities: Naval Facilities Engineering Command, Alexandria, Va., Autovon 221-0362 or Commercial (202) 325-0362

For Air Force activities: San Antonio



Air Logistics Center, Kelly Air Force Base, Texas, Autovon 945-8721 or Commercial (512) 925-8721

Any problems or questions that arise should be addressed to the Post-Award Branch since the ACO is the only individual that may obligate the government under the contract. Problems have occurred in the past when contractors have spoken with employees at the activity level rather than the ACO regarding extending delivery periods, waivers, and other contractual issues.

If it is decided to terminate an order for default, extreme care should be taken to ensure that a thoroughly documented reprocurement is performed by the activity. Normally, DFSC will repurchase your needs expeditiously; however, if a base receives a Local Purchase Authorization, the DFSC Post-Award Branch should be contacted for guidance prior to repurchase action.

Contractor requests for waivers on coal specifications are processed through the DFSC Quality Assurance and Technical Services Directorate and coordinated with the user and the ICPs. Because coal is not a manufactured product, slight variances sometimes occur and each is reviewed to determine if a reduction in price can be obtained for accepting slightly nonconforming product.

Problems or questions concerning the coal program should be directed to DFSC at (202) 274-4448 or autovon 284-4448.

Service Contracts (Bunkers, Into-Plane, Credit Cards)

In addition to supplying fuel products to customers at military installations, DFSC also provides fuel at commercial locations worldwide. Three of these programs are:

a. Into-Plane: The into-plane program provides contractor coverage at over 250 airport locations worldwide for fuel delivery to U.S. government aircraft. Delivery transactions are made through the use of an Identaplate. The Identaplate is similar to a credit card and is issued to each aircraft for its exclusive use. No delivery orders are placed. Aircraft may land at any of the contracted locations; the pilot then produces his Identaplate and the contractor delivers the required amount of fuel and completes a DD Form 1898. Contractor invoices for this program are paid by the DLA Administrative Support Center. The advantages of this program are the substantial savings that the government achieves in price over paying the local posted price, the assurance that the fuel and equipment meet quality specifications and safety standards, and an assured source of supply for the military pilot. Use of these into-plane contracts is mandatory for aircraft requiring fuel. Information concerning the availability of fuel is contained in the Defense Department's *Flight Information Publication* and in the *DFSC Aviation Fuel and Aviation Oil Into-plane Contract Listing.*

The DFSC Production Division into-plane ACO should be contacted for any problems with contractor performance. The number is autovon 284-6996 or commercial (202) 274-6996.

b. When a Navy, Coast Guard, Military Sealift Command, or other government vessel calls at a non-Navy port it frequently needs to refuel using DFSC bunker contracts. Fuel under these contracts is available in over 140 ports in the United States and in overseas locations (primarily in Europe and the Middle East). One of the important aspects of bunker contracts is the need to place a *written* delivery order (DD Form 1155). Because of the need for rapid service, verbal orders are normally placed for bunker fuel. These must be confirmed in writing to ensure timely delivery and proper payment.

Another important rule in ordering under bunker contracts is "don't overorder." Contractors must back haul fuel that is ordered and not taken. Depending on the distance travelled, these back haul charges can exceed several thousand dollars. Don't waste fuel dollars: don't overorder.

Specifics of the bunker program are contained in the bulletin, which is available from DFSC. Payment of bunker contracts is made by local paying offices. In general, you should receive your product within 48 hours after placing a bunker order. If you don't, please contact the DFSC ACO at autovon 284-4448 or commercial (202) 274-4448. For Europe and Middle East bunker problems, contact Defense Fuel Region Europe, message address DFR Europe, Vaihingen, GE.

c. Credit Cards: DFSC also administers the National Credit Card program. The familiar red-and-white government credit card are used to purchase gasoline for government-owned vehicles. Payments for these invoices are made by the billing address indicated on the card. Four points should be kept in mind when using a government credit card. First, fuel should only be obtained using the card when fuel is not readily available from another source, e.g., a motor pool or other government fuel storage. Second, the government credit card is *never* authorized for use with privately-owned vehicles, regardless of whether the vehicle is being used for official business. Third, dealers should never add a surcharge for using the card. The user should ensure that the government only pays the pump price. Fourth, the U.S. government National Credit Card is *not* universally accepted. Users should consult DFSC handbook 4280.1, a copy of which is normally in a government vehicle, to determine which dealers participate in the program.

If you have questions regarding the credit card program, please contact DFSC at autovon 284-7268 or commercial (202) 274-7268. Questions regarding failure of dealers to accept the cards should be addressed to the DFSC ACO at autovon 284-7461 or commercial (202) 274-7461.

d. Alongside Aircraft Refueling: The aircraft refueling contracts written by DFSC are for the refueling of aircraft at 29 Navy and Marine Corps activities, and one Army activity. The contractors provide the refueling trucks and the labor; the government provides the fuel. At some bases, the contractor is also responsible for the operation of the fuel storage facility. Contract administration issues usually center on safety and quality deficiencies of the trucks which must meet very stringent technical requirements.

If you have any questions regarding this program, please contact the DFSC ACO at autovon 284-6996 or commercial (202) 274-6996. For technical questions, please contact the Navy Petroleum Office at autovon 284-7488 or commercial (202) 274-7488.

e. DFSC stores its products in over 200 terminals worldwide. Many of these are contracted for as either govenment-owned, contractor-operated or contractor-owned, contractor-operated. DFSC quality surveillance representatives ensure that the contractors maintain product quality for the products they store. DFSC users have little direct dealing with our storage contractors, but if questions arise, you may contact the Services/Specialty Fuels Post-Award Branch at (202) 274-6195, autovon 284-6195.

The preceding summary illustrates that one important element of a successful contract administration program is timely notification for contract-related problems. DFSC must first be aware of a problem before it can be resolved. We want to keep all our consumers happy, but to do that we need their help.

Contracts for Small Business and Small Disadvantaged Business

by Shirley Downes, DFSC Associate Director of Small Business

It is the policy of the government that a fair proportion of its acquisitions be placed with small business and small disadvantaged business firms. Every major government buying organization has a small business office that is responsible for carrying out that agency's small business programs.

To carry out its responsibilities, the DFSC Small Business Office provides information and counseling to small business concerns and works closely with other government agencies such as the Small Business Administration (SBA), the Department of Labor, and the Commerce Department. The goal is to make sure that small and disadvantaged businesses are afforded every opportunity to win awards and perform satisfactorily on them. The Small Business Office staff also provides guidance for and advice to contracting personnel on matters concerning small business set-asides, contracting under the SBA's 8(a) program, determinations of responsiveness and responsibility, subcontracting possibilities, and non-performance by small businesses.

Users who have questions on DFSC's small and disadvantaged business program may address them to: DFSC-DU, Cameron Station, Alexandria, Va. 22304-6160. You may telephone the office at commercial (202) 274-7428, or autovon 284-7428.

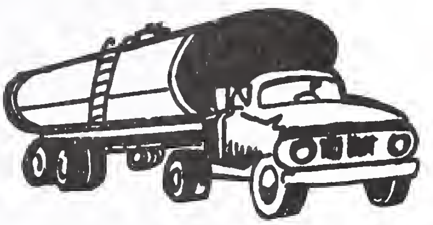
Fiscal 1985

Small and Disadvantaged Business Awards

Small Business Awards and Set-Asides	$1,917,462,000
Disadvantaged Small Business Awards	$ 187,560,607

Inspection and Acceptance Procedures for Posts, Camps, and Stations Bulletin Contracts

by Lee Oppenheim, Directorate of Quality Assurance and Technical Services



The important point to remember about posts, camps, and stations contracts is that inspection for quality and acceptance of product is at destination. It is incumbent upon the receiving activity to have the conveyance and product inspected prior to off-loading. When you allow the conveyance to off-load, you are, for all intents and purposes, accepting the product for your activity and obligating the U.S. government to purchase it. Inspection procedures and the degree to which you inspect depend on many factors. Defense Department/military service/agency directives, regulations, instructions, and manuals provide basic guidance. Add to these publications such factors as the type of service you receive, the logistics associated with delivery, and your degree of confidence in the contractor to ascertain the actual procedure you should use for inspection and the degree to which you will inspect. The minimum requirements for inspection can be found in Military Handbook 200, Table III, "Minimum Sampling and Testing Requirements for Petroleum Products."

UNDERSTANDING THE CONTRACT, CONTRACTOR'S RESPONSIBILITIES, AND CONSUMERS' REQUIREMENTS

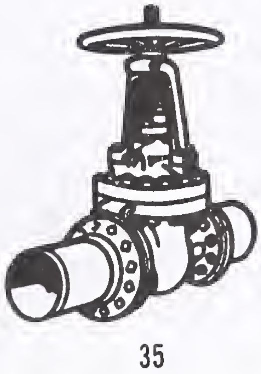
Familiarize yourself with the requirements of the contract and the inspection and acceptance criteria. Ask questions of yourself:

- Do I need to do anything immediately after contract award; before ordering?
- What procedures will I need to follow when the conveyance arrives?
- What, how, and where am I receiving it?
- Do I need to inspect the conveyance/hoses/seals?
- What information should be on the shipping document?
- Do I need to take a sample or samples?
- Do I need to perform any test(s)?
- Do I need to check for water and sediment?
- What do I need to do to assure the stated quantity of product is being placed in my tank?
- How can I ensure that the contractor is performing properly in accordance with the terms of the contract?
- Where do I turn for help when problems arise?

Now that you have answered the questions concerning your contract, the services as required in the schedule, and your inspection and acceptance criteria, share this information with the contractor. Try to do this as soon as possible after the contract award and before the first delivery arrives. This is the best time to clear up any misunderstandings. Review with the contractor what is required and what you expect, and determine if the contractor is in complete accord with you. Remember, if you have tanks on a degree day system (clause F19) or automatic fill system (F20) you most provide the contractor with certain information: notably a map of the facility, tank locations, product required in each tank, capacity of each tank, prior month's/year's usage, and any restrictions on conveyance movement. Keep the contractor informed when you envision an abnormally high usage (as compared with historical data) so that the contractor can plan ahead. You should also obtain the name and phone number of the person your contractor has designated to resolve problems and complaints about service. Try contacting that person first to solve your problems, whether those problems are real or potential.

HOW TO DETERMINE QUANTITY

Agreement must be reached with the contractor on the method used to determine quantity. First to be determined is whether the product is being purchased at ambient temperature or at a standard temperature (normally 60 degrees F). In accordance with clause F1.09b of the contract, all residual fuels (fuel oil numbers 4, 5, and 6) must be corrected to a volume at the standard temperature by using tables 5b and 6b of the Petroleum Measurement Tables (American Society of Testing and Materials—D1250). A single delivery of gasoline or distillate fuels (including gasolines, diesel fuel oil numbers 1 and 2, numbers 1 and 2 fuel oil, and F-76 diesel fuel) in quantities exceeding 3,500 U.S. gallons must also be corrected to the standard temperature using tables 5b and 6b. The method for calculating quantities to 60 degrees F can be found in Defense Department and military service publications (see appendix 2-5c of Department of Defense manual 4140.25M or Chapter 11 of FM10-69).



For free on board (f.o.b.) destination deliveries, clause F1.09.a.ii, "Determination of Quantity," provides the available options. Assuming f.o.b. destination delivery, the options are:

- Receipts by barge into shore tank (see clause F1.09.a.ii.(a)). Use receiving shore tank measurements.
- Receipts by tank car (see clause F1.09.a.ii.(b)). Verify by:
  a. Capacity table of the tank car received.
  b. Weight of the tank car before and after discharging. This requires that the receiving activity have a rail weighbridge on site or close at hand.
- Receipts by pipeline (see clause F1.09.a.ii.(d)). Verify by:
  a. Receiving tank measurements (or at the government's option).
  b. Meter on the receiving line.
- Receipts by transport truck and trailer or tank wagon (see clause F1.09.a(ii)(c)).

The contractor's vehicles *must have* a way of measuring the product. To meet these needs the contractor must use one of the following methods:

a. Certified capacity tables.
b. Calibrated meters on the delivery system.
c. Tank calibrated markers. (Not acceptable for Army receiving activities.)

Method c. can be used only if the vehicle is loaded full to the marker and the entire load is discharged at the receiving activity. The marker(s) must be permanently affixed in the cargo tank and not show signs of tampering.

You, acting as the receiving activity, can elect to supersede the contractor's option and determine quantity by one of two methods. The two government options are:

a. By weight (difference between weight of the vehicle and product before discharging and the weight of the vehicle and residual product after discharging). A weighbridge is required on site or extremely close at hand to make this method effective.

b. By calibrated meters on the receiving system.

If you elect to use either of the government option methods for determining quantity, then you should try to advise the contractor of the method to be used in advance.

If for some reason none of the methods discussed so far are desired, the receiving activity and the contractor can, by mutual agreement, determine quantity by either of the following methods:

a. By receiving tank measurements. Receiving tanks must have a valid calibration table.

b. By the net quantity appearing on the shipping document PROVIDED the loaded figure was determined by any of the following methods:

*(1) Certified capacity tables of conveyance; or

*(2) Loading rack meter; or

*(3) By weight at time of loading.

*Note: In these cases, the conveyance must be effectively sealed with serially numbered seals and the numbers recorded on the shipping document. If all seals are not intact or seal numbers not recorded on the shipping document upon arrival at your activity, DO NOT ACCEPT THE DELIVERY. Send the truck back to the contractor and notify your ordering/contracting officer.

INSPECTION PROCEDURES, PRELUDE TO PRODUCT ACCEPTANCE

You know what the contractual requirements are, have met with the contractor, and have come to an understanding of what is expected by both parties. For those performing the inspection acceptance function, the next step covers what to do when the product arrives.

The first procedure is to check the conveyance paperwork which accompanies the shipment. Make sure on paper the correct product is being delivered and the receiving tanks, if noted, are correctly recorded.

Next, make sure the contractor's representative (e.g., the truck driver) understands how the quantity will be determined. If seals are required, assure they are still intact and the numbers agree with what is annotated on the shipping documents. If seals have been broken, then reject the conveyance and record the particulars: vehicle's number, driver, date, product, reason for rejection. If you reach this point without any problem, you proceed to those checks needed to verify product quality. The military services and the Defense Department both have instructions on the method of inspecting incoming conveyances. In general, the following procedures apply:

(1) Take an all-level sample from each compartment and view the sample in a clear glass container. Make a visual check—is it clean and bright? Does it look and smell like the product ordered? Label the sample with all pertinent information if retained or for testing. Remember, you are permitted to perform tests you deem appropriate and are capable of performing. If you do perform specification tests, ensure the results comply with the specification/contract requirements.

(2) Check for water and sediment which may have settled out in transit by taking samples from the bottom outlet. If excessive water and sediment are found, reject the vehicle. Notify the ordering/contracting officer with pertinent details.

(3) Make sure delivery hoses and nozzles are clean. Hoses should be capped or put in hose racks with caps during transportation.

(4) Ensure the quantity measurement system meets requirements and does not indicate tampering.

The frequency with which you perform all these operations is also dependent on the method of delivery. Conveyances delivering full loads into one receiving tank should be inspected on each delivery. Degree day and automatic fill systems may be spot checked. Based on your show of concern, the contractors and contractor personnel will be aware of your commitment to quality.

Take a sample from the contractor's conveyance for type B-2 minimum testing on a periodic basis. This sample should be sent to your designated area lab. The *minimum* frequency with which this sample is to be taken is based on your service directives.

Remember to put all information on the label, to include contractor, contract number, line item number, grade of product, date of delivery, source of sample, type of sample, conveyance identification, and specification of product ordered.

You've performed all the proper steps in inspecting and accepting fuel for your activity. Somewhere along the line you've encountered a problem. What do you do then? Try first to resolve problems with the contractor whenever possible. Report discrepancies to the ordering/administrative officer at your activity. This officer should process your formal complaint. In the case of off-specification product, continued non-performance, or violations of contract requirements, report the problem to your service inventory control point or DFSC. Remember that we need to hear from you to provide aid or to seek corrective action from a contractor.

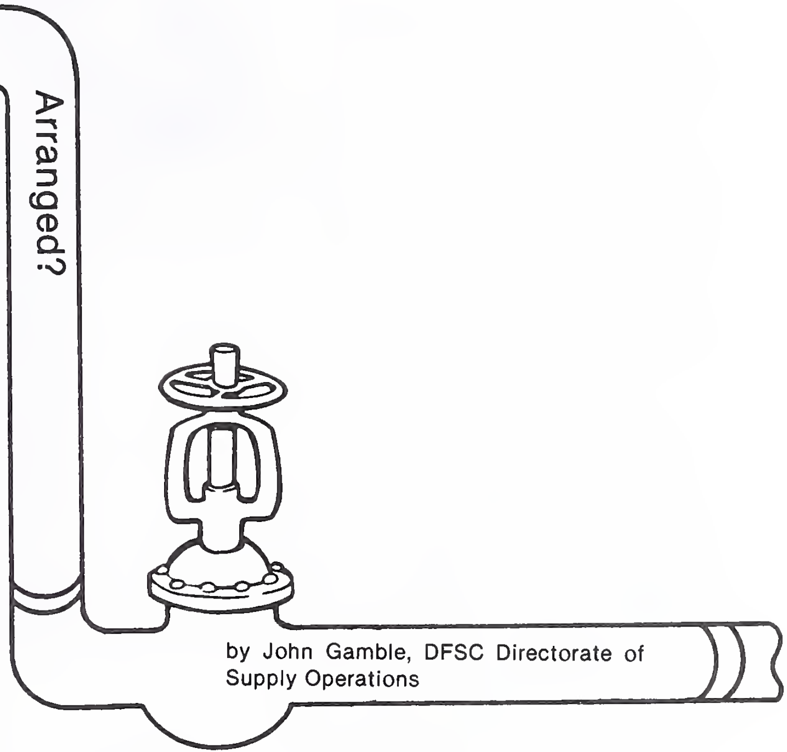
When problems develop, tell the contractor about them. At the same time, increase the frequency of your inspections. See if the contractor is taking action to correct the problem. In the case of off-specification fuel being delivered, as indicated by testing a delivery sample, do not assume that no harm is done if mechanical problems do not immediately highlight the off-specification receipt. The equipment may begin to show problems many months later. If you do not report the off-specification delivery, DFSC may have problems in any claim action against the contractor. Report quality problems to your service inventory control point, Defense Fuel Region, and/or the DFSC Customer/Depot Complaint Focal Point immediately and request assistance.

This focal point is for consumer complaints about inspection and acceptance—quality and quantity. Request assistance from us when you are unable to solve problems yourself. We have trained quality representatives scattered throughout the world willing to assist your activity. We can be reached as follows:

Autovon: 284-7441
Commercial: (202) 274-7441

How is Transportation Arranged?

by John Gamble, DFSC Directorate of Supply Operations



From their earliest raw material state until their ultimate consumption, the goods which constitute the commerce of our nation require a series of decisions involving transportation, whether the move is across town or halfway around the world. Most of these decisions are the responsibility of traffic managers whose basic objective is to obtain transportation services tailored to fit a particular commodity. The efficient procurement of transportation service demands a high degree of traffic management skills, skills which are all the more essential because of the amount of money at stake. The traffic manager must weigh the relative merits of rail, highway, water, air, and pipeline modes; determine shipping quantities; and include such factors as terminal locations and packaging.

An important aim of every purchaser of transportation is to satisfy service requirements at the lowest possible cost. Bulk fuel and chemical additives may be purchased free on board (f.o.b.) origin or f.o.b. destination. F.o.b. origin purchases enable the government to route freight via the service best suited to the operation, negotiate to reduce freight rates, and arrange for consolidation of shipments to avoid the more expensive individual movement methods.

Vendors selling on an f.o.b. destination basis include in their price the cost of transportation. They are inclined to add in additional costs to obtain reimbursement for such factors as: advancing capital funds to prepay freight, assuming the risks of transportation, filing loss and damage claims, expediting urgent shipments, and delays in receiving payment for goods since invoices are not usually payable until goods have been received at the destination.

The transportation industry changes continually and it is essential for the traffic manager to be well informed. With the advent of deregulation, the industry has been in a constant state of flux. Private motor carriers are making it necessary for the railroads and common motor carriers to depart from the age-old ratemaking basis of what the traffic will bear, or one's ability to pay. To remain competitive, common carriers are forced to quote commodity rates and provide a wider range of services.

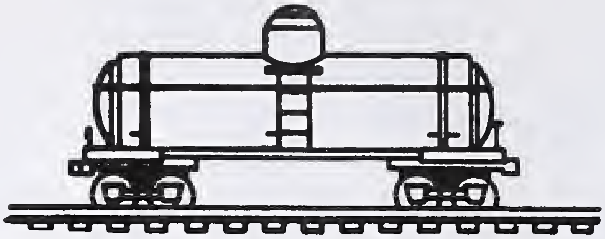
Each common carrier transportation mode has distinct advantages for shippers in terms of speed, capacity, flexibility, and cost. At one extreme of the scale is the air carrier, with tremendous speed but limited load-carrying capacity and relatively high rates. On the other end of the scale is the water carrier, with tremendous capacity, much lower rates, and longer transit intervals. The increasing use of pipeline transportation for movement of liquid products has added another dimension to the competitive picture.

Chapters 2 and 6 of Department of Defense manual 4140.25M, *Procedures for the Management of Petroleum Products,* and Chapter 7 of Department of Defense manual 4140.4, *Supply Operations Manual*, mandate that DFSC manage traffic and transportation to ensure efficient and economical fuel distribution. To do this, DFSC relies on its strategically located Defense Fuel Regions (DFRs) as command and focal points for arranging and coordinating fuel delivery. These DFRs maintain a close working relationship with consumers, refineries, and various agencies to provide information and advice on transportation requirements, delivery patterns, and efficient, economical movement of commodities within their assigned geographical areas.

All factors affecting the transportation of fuel from supply source to destination user are taken into consideration when selecting the most efficient and economical traffic pattern. Only after the traffic manager has taken all of these factors into consideration are instructions issued to the shipping locations designating the carrier or carriers to be used, and other necessary guidance for delivery of the product.

To see that fuel is delivered where needed, when needed, in the quantity and of the quality needed, DFSC and the DFRs rely heavily upon information furnished by the military activities. An activity's capability to receive fuel, its capacity for and availability of storage, and its facilities to accommodate various modes of transportation are examples of the information required. Therefore, it is vitally important that each military activity convey timely, complete, and accurate information. The media for conveying this information are the Report of Bulk Petroleum Storage Facilities and Report of Bulk Petroleum Receipt and Shipment Capability (DD-M(A)506). Military activities can provide tremendous assistance in the distribution process by assuring that the 506 data is both current and accurate.

As the military budget faces constant reviews and stringent reductions, it is important for DFSC to find more cost effi-



TRANSPORTATION OPTIONS

TRUCK/RAIL:	Open Route Guaranteed Traffic
BARGE:	Spot Move Volume Move Affreightment Agreement
PIPELINE:	Commercial Dedicated

---

cient means of fuel delivery without sacrificing service. In this regard a great deal of emphasis has been placed upon the expanded use of petroleum pipelines, the most energy efficient mode of transportation. Not only do pipelines result in lower transportation costs, they also assist the military activity by providing a less labor-intensive mode of receipt. The following activities are being examined as potential candidates for future pipeline connections:

Pope Air Force Base, N.C.
Naval Air Station Moffett Field, Calif.
Randolph Air Force Base, Texas
Kelly Air Force Base, Texas
Air National Guard, Knoxville, Tenn.

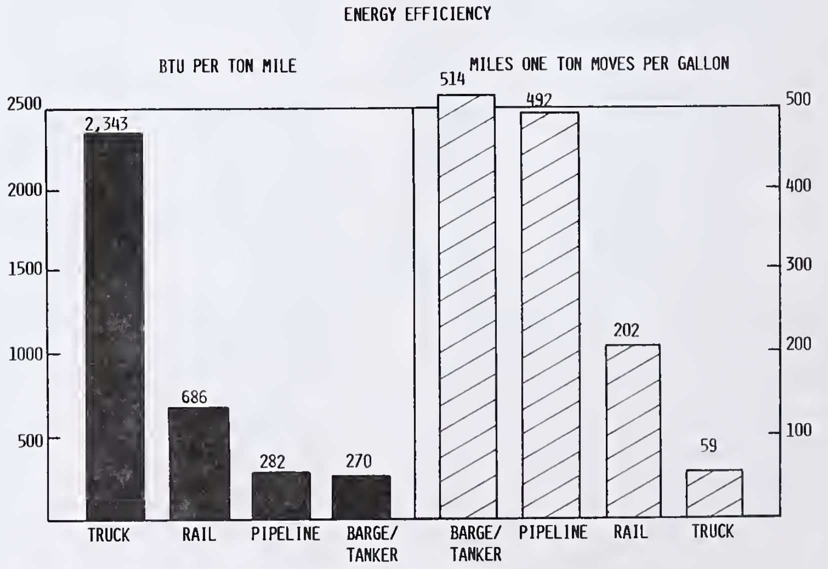
DFSC is also proposing changes in an above-ground transportation mode. The Defense Department rail fleet consists of 10,000-gallon capacity tank cars. The use of larger and more modern tank cars has been strongly supported by DFSC. Use of 20,000-gallon or even 30,000-gallon capacity cars could cut the number of deliveries by half or two thirds. The major hurdle in obtaining these larger cars is funding. While requests have been submitted, Congress has not allocated the required money for the new tank cars. To offset this delay, DFSC is working closely with the Military Traffic Management Command to explore leasing larger commercial cars from the private sector.

In all forms of transportation, competition provides the best answer for achieving lower cost. Under what is known as the "Guaranteed Traffic Program," continental U.S. DFRs carefully analyze traffic patterns to pinpoint recurring high-volume shipments between relatively stable origin/destination locations. This traffic is offered to the transportation industry and awarded to the lowest bidder. The following table indicates money saved under this program in the last 2 years:

Calendar Year	Extent of Savings
1983-1984	$1,089,836
1985-1986	$ 943,844

The future in petroleum transportation will bring increased emphasis on safety, as reflected in equipment design, and the classification and resultant handling of our commodities as hazardous products. Although there is a tendency toward using lighter materials in transportation equipment, their use may increase the likelihood of a rupture or spill. Insurance costs would escalate accordingly, and transportation rates rise proportionately.

Traffic managers have found, conversely, that double-bottom barges lessen the risk of a spill caused by grounding. However, the double-bottom design results in lower payloads and higher transportation rates. The future challenge for the traffic manager will be to balance all of these factors—and continue to get the fuel to the consumer when and where it is needed.



Managing Fuel Facilities

The 95 million barrels of product that DFSC holds in the wholesale storage system is in a complex of 210 terminals located throughout the continental United States and overseas. These facilities vary greatly in size, type, geographical setting—and ownership. Some are government-owned, contractor-operated (GOCO), others are contractor-owned and contractor-operated (COCO), and still others are government-owned and government-operated (GOGO). Depending on their ownership status, the terminals may be run by U.S. and foreign military personnel, civilian government representatives, or contractors. Terminal operating agreements are governed by a multitude of terms, including North Atlantic Treaty Organization and various bilateral agreements, and are subject to Status of Force Agreements and host nation laws in conjunction with the Federal Acquisition Regulation.

The Directorate of Facilities Management directly participates in planning, acquisition, construction, maintenance, and repair for these storage facilities. Working in conjunction with other DFSC staff elements, the services, and the Unified Commands, the directorate is responsible for the engineering, environmental, and terminal management functions within DFSC. The directorate is currently headed by an Air Force colonel with 22 civilians organized into three divisions. Department of Defense Directive 4140.25 and the Defense Stock Fund Charter provide the authority for use of the defense stock fund for GOCO operation, COCO acquisition, and both GOCO and GOGO maintenance, repair, and minor construction. Military construction (MILCON) projects are processed through congressional channels.

ENGINEERING PLANS AND SERVICES DIVISION

The Engineering Plans and Services Division provides professional engineering skills and counsel for worldwide fuel facility matters. Each engineer manages, coordinates, reviews, and provides engineering guidance on fuel facility projects. This comprehensive program management requires specialized knowledge of several technical areas which enable the engineer to be conversant with various fuel systems, including pumping facilities, power distribution, pipelines, alarm systems, fire protection and safety systems, and general construction methods and materials. Currently, the division has a multidisciplinary engineering team with experience in electrical, mechanical, civil, and petroleum engineering.

There are two major ongoing fuel facility actions requiring attention: Real Property Maintenance Activities (RPMA) and MILCON. In particular, some engineers have responsibility for managing the petroleum facility RPMA program for GOCO and GOGO facilities within specified regions throughout the globe. These responsibilities include:

a. Preparing annual documentation for RPM projects for fuel facilities within an assigned region and arranging for action with either the Corps of Engineers or Naval Facilities Engineering Command for design execution.

b. Managing the project to ensure appropriate progress and reviewing designs submitted to ensure that DFSC's requirements are being met and are consistent with good engineering practices.

c. Managing project construction progress once the design is completed and providing guidance for decisions related to necessary contract changes.

d. Budgeting and initiating funding cycles and ensuring the validity of estimates for each project.

The division also has taken on the additional responsibility of funding maintenance and repair projects at worldwide defense fuel facilities. Project documentation is provided through the commanders-in-chief and services headquarters. It is reviewed to determine project validity and funding recommendations are then made. The assigned engineer project managers ensure that the funds are processed and that projects are tracked.

The MILCON program allows construction of projects exceeding $200,000 in funded construction costs. Requests for projects that support the bulk fuel management mission are forwarded annually to DFSC by the services.

Each submission consists of MILCON program/project data (Forms DD 1390 and 1391), a facilities study, a brief assessment of potential environmental impact, and the proponent's prioritization preferences. Each is reviewed for validity, reconciliation with master plans for fuel facilities, and integration into appropriate budget planning documents. After approval at the DFSC Annual Installation Planning and Review Board meeting, the project package is then forwarded to the Defense Logistics Agency (DLA), for incorporation into the DLA MILCON program.

In addition, the division serves as the DFSC fire marshal and carries out the DFSC fire prevention program at GOCO terminals.

ENVIRONMENTAL QUALITY DIVISION

The Environmental Quality Division manages the environmental quality program for DFSC's 16 GOCOs and for DLA-sponsored MILCON projects related to fuel storage and distribution systems.

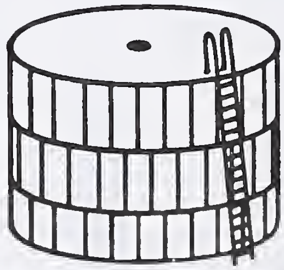
All Defense Fuel Support Point (DFSP) operations are required by federal law to comply with environmental codes and standards for their areas. The regulatory agencies are usually at the local or state government level. Occasionally, they are from the regional offices of the U.S. Environmental Protection Agency (EPA). Most environmental codes and standards are outgrowths of congressional legislation, namely the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act. These acts compel EPA and the states to develop strict controls for air, water, and hazardous polluting effluents from workplaces, particularly industrial sites such as DFSPs.

The division ensures that GOCOs comply with these regulatory controls. The compliance is maintained through liaison with industry and various regulatory agencies, periodic inspection of fuel facilities, project development for abatement and restoration, and continuous monitoring of facilities and procedures. Regulated air pollutants include hydrocarbon vapors (primarily from JP-4 storage and handling operations). Regulated water pollutants include organic compounds from fuel tank water bottom releases. Hazardous effluents associated with terminals include spilled or leaked fuel which can contaminate soils and groundwater. There may also be threats to shallow well water sources from past fuel leaks. Past storage tank and pipeline leaks and occasional fuel spills have required us to establish extensive soil and groundwater sampling programs at six of the GOCO fuel terminals. Each environmental protection specialist is assigned monitorship of GOCOs on a geographic basis. Cleanup and restoration of these contaminated areas is a priority long-term goal.

Federal law also requires DFSC, when it is the lead or supporting agency, to prepare environmental impact assessments for all proposed military construction projects in the United States and overseas. This work frequently requires extensive coordination and review sessions among DFSC, EPA, state and local agencies, and public interest groups.

The Environmental Quality Division's continuing effort to design, fund, and accomplish DFSC's far flung environmental program requires the timely cooperation and skills of our engineering and terminal management staffs, the Defense Fuel Regions (DFRs), and the DFSC legal, comptroller, and contracting offices. The DFSC environmental program has been a success due to its quality and the effective cooperation of all these activities.

TERMINAL MANAGEMENT DIVISION



The Terminal Management Division oversees requirements for contractor-operated and bulk storage facilities. Storage requirements from the military services are translated into the Worldwide Integrated Storage Plan by the Supply Operations Directorate. The Terminal Management Division then issues the necessary documents to acquire the storage. The storage requirement is developed into a purchase request and a statement of work to ensure that the comptroller can provide funding and the contracting officer can obtain the contract services. The document development process requires analyzing each individual storage requirement. Factors considered are types of products, volumes, throughput, and location. These requirements are coordinated with the applicable DFSC staff elements and the appropriate DFR, and storage budgetary limitations are considered.

To assure accurate and timely processing of these storage requirements, an up-to-date historical source file is maintained for the types of storage and associated facilities required for each product, the types of facilities required for each transportation mode, and the operational needs for the volume of activity programmed at the storage facility. Other functions involve the preparation and development of cost comparative analysis and cost estimates; providing technical advice to the contracting officer for preparing solicitations and evaluating solicitation responses; evaluation and coordination of unsolicited proposals; development, coordination, and implementation of interservice support agreements; development of budget estimates for operation and emergency repair of terminals under DFSC control; and participation in management assistance teams.

The division has experienced, qualified personnel to meet the mission objectives of DFSC under unusual and difficult circumstances. They have been called upon to supervise and operate a DFSP, augment a mishap investigation team, inspect and evaluate the bulk storage facilities of a foreign government, inspect and evaluate commercial and state-owned bulk storage facilities, and assist in developing special contract provisions and clauses.

The division publishes the annual Bulk Petroleum Storage Facilities Report (RCS: DD-M(A) 506), commonly known as the "506 report." The 506 report contains over 100 data elements on storage, receiving, and shipping capability. All Defense Department-owned tankage of 500 barrels or more from both wholesale and retail activities is included in this report. The 506 report is updated annually through inputs from the services, Joint Petroleum Offices, and DFRs. The report is used extensively throughout the petroleum logistics community.

The Stock Fund and Accounting— Understanding Fuel Pricing

by Tom Waddell, Office of Comptroller

DATELINE: "OPEC Again Is Failing to Reach Pact; New Drop in Oil Prices Seen This Year," *Wall Street Journal*, 30 June 1986.

We all saw the headlines on falling fuel prices and we all watched the posted figures tumble at our neighborhood gas pumps. Given the continual attention that the news media pays to the Defense Department budget, it came as no surprise then, when DFSC began receiving media inquiries regarding how much "the military services will save" on fuel purchases. A typical question was "How much less is the Air Force spending for jet fuel now than it was 3 months ago?" One reporter wondered if he could simply multiply the savings per gallon over one month's time by the number of gallons purchased during the year to come up with the annual savings. This gargantuan figure, in turn, could be used to whittle down the fiscal 1987 defense budget—if the price stayed down. Alas, as anyone who is vaguely familiar with the oil market can attest, that is a pretty big "if."

Under the standard price system the military services "pay" the same price for a particular fuel throughout the entire fiscal year, no matter what happens on the world market. So as fuel costs declined, no adjustment to the DFSC price took place, leaving the appearance that the Defense Department was not getting a fair deal. The truth is the Defense Department was taking full advantage of lower prices and DFSC was making refunds to the military services for the difference. However, those not familiar with the stock fund expected DFSC to change prices: an option which is not available to DFSC. Thus, in many cases, prices on the local economy were less than the standard price even though DFSC was actually paying the lowest rates available. It is easy to see the consternation this causes to conscientious local procurement officials who are not aware of the "big picture" (the refunds) or the stock fund "rules."

This article provides a basic, plain explanation of the financial side of DFSC. It strives to anticipate and answer questions military fuels logisticians may have on fuels finances, including the often repeated, "What happens to the money saved during an oil glut?"

THE STOCK FUND AND STANDARD PRICES

DFSC purchases all of its fuels with a revolving stock fund. We sell petroleum products to our customers and use the receipts to replenish the quantity sold, thus maintaining an inventory that meets the needs of the military services. Unlike business accounts, the stock fund was not established to make a profit or to incur a deficit and cannot show long-term gains and losses. Profits or losses within the stock fund are controlled by the price stabilization policy of standard pricing.

Congress mandated the standard price system to protect the purchasing power of the military services and to make budgeting easier. The military services use the standard price, which is fixed and stable, to assure they obtain adequate funding for fuel purchases. In this way the military services know precisely, based on their requirements, the dollar amount to be spent on fuel during the fiscal year.

The standard price, which varies for each category of petroleum products, is established 18 months prior to each fiscal year and is based on national fiscal policies, logistical costs, and assumptions about procurements. Specific fiscal factors considered include projected inflation rates, customer account funding, and how much cash is in the stock fund. Logistical costs encompass transportation, leasing of storage facilities, quality testing, and wholesale product losses resulting from shipping, evaporation, or contamination.

STANDARD PRICES VERSUS CONTRACT PRICES

Because oil prices are volatile, each DFSC contract price is tied to an industry-recognized and accepted market index. Market indexes are specified in each solicitation based on an extensive market analysis by DFSC. As the price in the index increases or decreases, the price DFSC pays follows a similar pattern. For example, if the wholesale price of refined heating oil in New York Harbor decreases by one cent per gallon, any DFSC contracts tied to that price index will also decrease one cent per gallon.

Thus, the fuel prices paid by DFSC

are competitive with commercial wholesale prices and can vary widely. Standard prices, of course, remain the same throughout the year. The operation and maintenance funding authority for the military services is based on the standard price. When the actual costs for fuel are lower than the standard price, the stock fund cash increases. When costs are more than the standard price, the stock fund cash decreases.

REFUNDS AND ADJUSTMENTS

If the stock fund generates excess funds, the funds are either refunded at the military service level in the execution year, refunded through lower standard prices in the subsequent fiscal year—or both. The amount of any refund is set by Congress. In fiscal years 1985 and 1986, because the standard price was higher than the procurement price, the stock fund refunded $1.6 billion to the services. (Though it is true that oil prices fell dramatically in the latter half of fiscal year 1986, through late November 1985 prices actually rose in world petroleum markets, thus offsetting some fuel savings.) As indicated earlier in this article, fiscal year 1987 standard prices have also dropped for most products, but if current fuel prices do not change, the services will receive another large refund.

ACCOUNTING

Accounting for the bulk petroleum division of the stock fund is done via the Defense Fuel Automated Management System, the design of which is approved by the General Accounting Office. The system's basic designs and functions are very similar to the "generally accepted accounting principles" used by the private sector.

Billing is accomplished based on issues from the stock fund inventory and direct delivery of fuel by a vendor. There are two methods used for billing: interfund and non-interfund. The majority of the stock fund billings are processed through interfund. The Military Standard Billing System is the umbrella covering standard procedures, data elements, codes, and formats used for billing.

* * *

The stock fund and its attendant accounting system have evolved through the years to accommodate the unpredictable nature of the world oil market—and to meet the predictably constant fuel needs of the military services. Those who understand the stock fund's nature recognize that its purpose is not to make a profit from the military services, but to provide the fiscal side of a centralized service: quality fuel and quality service for a reasonable price.

The following chart lists some standard prices for fiscal year 1986 and fiscal year 1987:

STANDARD PRICES

SUBCATEGORY	FISCAL YEAR 1986	FISCAL YEAR 1987
JP-4 Jet Fuel	.79	.73
JP-5 Jet Fuel	.87	.79
JP-8 Jet Fuel	.95	.85
Leaded Motor Gasoline	.83	.83
Unleaded Motor Gasoline	.86	.84
Aviation Gasoline	1.15	1.37
Distillates	.82	.75
Residuals	.76	.70

How Does DFSC Help During Armed Conflicts or Civil Emergencies?

by Captain Eugene P. Turner, U.S. Air Force, DFSC Office of Planning and Management

Wars and domestic conflicts involving our nation have taught us the importance of reliable petroleum support during national or international emergencies. DFSC has structured its mission operations toward fulfilling this vital need and has designed its contingency planning to counter potential disruptions in the petroleum resupply pipeline. The center is prepared for and capable of effectively operating throughout the continental United States (CONUS) and in overseas theaters to secure emergency fuel requirements for the military services and designated civilian facilities.

The combined efforts of each DFSC component are essential to meeting emergency fuel requirements. One element within DFSC whose operations are based upon this characteristic teamwork is the center's mobility task element, the Contingency Operations Group (COG). The COG is a dedicated team of DFSC specialists who could be deployed to virtually any civil or military petroleum emergency site. This group is prepared to deploy within 24 hours worldwide to one or more locations in rapid response to any emergency condition requiring the center's support. The COG's core of functional expertise includes contracting for petroleum products and services, quality assurance and technical assistance, and petroleum logistics operations and management.

DFSC support of the commanders-in-chief is not confined to the hard-core logistics functions. For example, managerial assistance is also provided to overseas Unified Commands through provisions for the use of alternate accounting procedures in combat situations. These procedures streamline fuel accountability by greatly reducing the volume of fuel documentation required in those areas which the unified commanders have determined are subject to hostile actions. Meanwhile, at the request of the unified commanders, DFSC will concurrently seek contracts in combat theaters for bulk fuel supplies, storage, into-plane deliveries, and destination deliveries of fuel by overland transportation modes.

Within CONUS, emergency fuel deliveries are made possible by the use of DFSC's Emergency Distribution Plans (EDPs). These plans, in conjunction with the Inventory Management Plan, provide for alternate sources of emergency fuel requirements for base-level and field activities. The EDPs identify the commercial carriers and modes by which the required fuel will be delivered if normal delivery modes are interrupted. Tentative arrangements

have been made with commercial carriers and state authorities to permit emergency movements of fuel to be conducted with minimum confusion and within the shortest timeframe possible.

DFSC's emergency support role is not solely confined to the needs of the military services. DFSC is also prepared to respond to a national civil defense emergency by providing petroleum resources to support state and local authorities under conditions involving an actual or potential attack on the United States, or in situations of civil unrest or natural disaster. During these crisis situations, DFSC will make available those fuel resources not otherwise committed to current or planned military operations. Civil authorities would normally request assistance from their regional Federal Emergency Management Agency headquarters. However, under the "automatic response" provision, each CONUS Defense Fuel Region commander can respond directly to requests from the civil sector and provide fuel support in an effort to save lives or prevent human suffering. This support is furnished within the DFR commanders' capabilities but will not supersede essential combat, combat support, or self-survival operations.

Through effective planning and operational preparedness, DFSC is always ready to make a smooth but rapid transition from peacetime operations to crisis response in support of both armed conflict and civil emergencies. The COG is always prepared for immediate deployment to even the most remote corners of the world. Overseas theater commanders may use alternate fuel accounting procedures in combat situations to alleviate administrative burdens. The EDPs have already identified alternate sources and modes of deliveries for fuel when primary sources fail. And all DFSC elements stand ready to assist the civil sector during periods of civil unrest and disaster relief. Although these few functional examples are only a part of our preparedness planning, our goal is to maintain an effective and efficient crisis response capability both in CONUS and overseas.

DFSC To Test New DFAMS Input System

by Roger Winters, DFSC Office of Telecommunications and Information Systems

DFSC's Office of Telecommunications and Information Systems is now developing a dial-up, microcomputer-based transaction input system for the Defense Fuel Automated Management System (DFAMS). The Defense Fuel Support Point (DFSP) at Point Loma, Calif., is the site for testing the prototype during the first quarter of fiscal 1987.

The menu-driven system will perform basic formatting, editing, auto-dial, and auto-sign-on. The microcomputer system will upload and download Military Standard Petroleum System transactions and rejects from a holding file on the DFAMS mainframe system. The holding file will be processed nightly during DFAMS processing.

Users of the new system will need to have or obtain microcomputer hardware and software compatible with that in use at DFSC to operate under the new system. Once a request for access has been received and approved, export will be via floppy disk or electronic bulletin board. This system may be tailored by user options to take advantage of color or operate on a monochrome monitor, and to use floppies or hard disks based on the choices selected during installation. DFSC will provide and maintain non-modifiable, compiled programs for the user community; these will be updated and released as required. The system will employ menus and windows to simplify training and to assist users in its operation.

The plan is to offer the system to DFAMS users in the military services, at DFSPs, and elsewhere if all proves successful at the experimental site.

The new system should greatly reduce transaction reporting time, reduce error correction time, and provide an alternative to the automatic digital network/Telecommunications Center (AUTODIN/TCC) interface and its associated delays. DFSC's long-range plans are to determine if the Defense Logistics Agency network (DLANET) can provide "dial-and-ride" access to DFAMS via the closest DLANET nodal site in order to reduce users' long-distance charges.

The *FUEL LINE* Interview Question

The *FUEL LINE* editor asked each of DFSC's directorate heads the following question: "In what ways could increased communication with the military activities we provide fuel for help you serve them better?"

Their responses and some of their other thoughts follow:

Captain Ronald I. Iverson, Supply Corps, U.S. Navy

Director, Directorate of Contracting and Production

"When I heard that question, one recent incident came to mind. Malmstrom Air Force Base in Montana submitted their coal requirements with a particular specification for AST (ash-softening temperature). The requirement went out on the street and one offeror proposed to supply the needed coal—only with a slightly different AST specification. Our coal people realized that by accepting this offer they could save over half a million dollars a year, so we went back to Malmstrom Air Force Base and asked if they could use such coal—and they could. Now this is just a little isolated incident, and it deals with coal, which is far from our biggest program, but it does illustrate how communication with the military services can dramatically affect how well we serve their interests. My directorate is, of course, the link after *the Supply Operations Directorate, which compiles service requirements, but we also work as a team with the Quality and Facilities Management Directorates to communicate directly with the customer. It is simply not a perfect world and there are enough short fuse requirements that it's really important to have good customer contact. We see examples all the time where if we point out ways we can modify a requirement the service realizes they* can *be better served. The communication lines run both ways—and military activities often call our administrative and procuring contracting officers, as they should, when there is a contractual problem or question."*

Colonel Robert E. McGough, U.S. Army

Director, Directorate of Supply Operations

"DFAMS [Defense Fuel Automated Management System] reporting and timeliness is still a major problem. We have a lot of rejected DFAMS transactions and both we and the military users need to understand what's causing them. I believe to increase communication the military services themselves have to be more familiar with the DFSC organization so they will know who to come to with their problems, whatever they are. We are currently working on two ways to improve the relationship. First, we are conducting quarterly meetings with the various service inventory control points. We had the first one in July with the U.S. Army General Materiel and Petroleum Activity and I thought it went extremely well. Also, we are in the process of preparing and publishing a DFAMS Customer Guide*—which really goes beyond a simple discussion of DFAMS and gets into the way in which DFSC operates."*

[Editor's Note: As mentioned in the Supply Operations Directorate portion of this special edition, the DFAMS guide should be printed by the end of the year with distribution shortly thereafter.]

Calvin J. Martin

Director, Directorate of Quality Assurance and Technical Services

"If we knew more about the day-to-day quality problems at the base level it would result in tighter quality assurance on our contracts and enable us to quickly weed out problem contractors. Bulk fuel quality issues are worked intensively at origin and any problems at destination are reported expeditiously. However, in the posts, camps, and stations program, the system is highly dependent on the reporting of any problems by receiving installations. I know that some activities routinely take samples for quality testing while others do so only when there is obviously a question or when equipment problems start to occur. I would like to encourage activities to report any quality problems right away. I am also not sure that all the people at base level are clear about who to contact when they have problems. [See the article in this issue entitled, "Inspection and Acceptance Procedures for Posts, Camps, and Stations Bulletin Contracts."] On the quantity side, I am not aware of any major problems, but of course people should continue to be aware of the potential for fraud or waste and monitor the situation. Anyone suspecting a problem should contact us here at the quality directorate, the administrative contracting officer for the contract, the appropriate Defense Fuel Region, or the service control point. Any one of these will quickly start investigative action. There is yet another avenue people may not be taking full advantage of: the Defense Logistics Agency customer relations program. Under the program, a team makes periodic visits to military activities served by the agency; military users are encouraged to speak up with problems or suggestions. But those we serve do not have to wait for such a visit—we are always ready and willing to assist in the quantity and quality arena."

Colonel Gomer C. Custer, U.S. Air Force

Director, Directorate of Facilities Management

"I think there is already a good communications network because of the relatively small number of people who are involved in POL [petroleum, oils, and lubricants]. Every military activity believes it is unique—and they all are, to some degree. But fuel has been a vital link between all the services that has long been truly integrated because the commodity is managed by only a few people. In 1973, when integrated materiel management first came about, many had doubts that centralized control was a good thing but I am convinced that the POL logistics community is far better off today because of it. In fact, I am a proponent of even more DFSC authority and responsibility for petroleum. One example which I oversee in this office is single point funding for the maintenance and repair of government-owned, government-operated fuel facilities worldwide. This initiative has brought us in even closer contact with Army, Navy, and Air Force personnel and the consolidation enables us to spend money more wisely by repairing those facilities most in need of upgrade. Now all the services have a vote on coordinating funds for the facilities—it's a more evenhanded approach to a very serious issue. We have all always worked closely—but now we are even closer; decisions are made in concert with each other."

TELEPHONE DIRECTORY FOR DFSC

Commercial Prefix (202) 274-XXXX	Autovon Prefix: 284-XXXX
OFFICE OF THE COMMANDER (DFSC-D)	47401
OFFICE OF THE DEPUTY COMMANDER (DFSC-DD)	47403
EXECUTIVE SUPPORT OFFICE (DFSC-DE)	47171
EMERGENCY SUPPLY OPERATIONS CENTER (DFSC-OSP)	48105
OFFICE OF ASSOCIATE DIRECTOR OF SMALL BUSINESS (DFSC-DU)	47428
OFFICE OF SAFETY AND HEALTH (DFSC-DW)	47400
OFFICE OF PUBLIC AFFAIRS (DFSC-DB)	46489
OFFICE OF MARKET RESEARCH AND ANALYSIS (DFSC-N)	46570
OFFICE OF COUNSEL (DFSC-G)	47445
OFFICE OF POLICY AND PLANS (DFSC-L)	47423
International Logistics (DFSC-LN)	44598
Planning Division (DFSC-LR)	47804
OFFICE OF COMPTROLLER (DFSC-C)	46436
Management Information Division (DFSC-CM)	47334
Program Budget Division (DFSC-CB)	49287
Accounting and Finance Division (DFSC-CF)	47528
OFFICE OF TELECOMMUNICATIONS AND INFORMATION SYSTEMS (DFSC-S)	47848
Systems and Procedures Division (DFSC-SC)	47846
Systems Design and Programs Division (DFSC-SS)	46029
Technical Operations Division (DFSC-ST)	47780
DIRECTORATE OF SUPPLY OPERATIONS (DFSC-O)	47408
Logistics Programs Division (DFSC-OP)	47067
Stock Control Division (DFSC-OS)	46981
Inventory Management Division (DFSC-OI)	47512
Transportation Division (DFSC-OT)	47471
DIRECTORATE OF CONTRACTING AND PRODUCTION (DFSC-P)	47431
Competition and Pricing Office (DFSC-PA)	47798
Ground Fuels Division (DFSC-PE)	47840
Specialty Fuels Division (DFSC-PH)	47411
Operations Support Office (DFSC-PO)	47465
Policy, Plans, and Systems Office (DFSC-PP)	46306
Production Division (DFSC-PR)	45346
Special Acquisitions Division (DFSC-PS)	48362
Bulk Fuels Division (DFSC-PZ)	47453
*DIRECTORATE OF QUALITY ASSURANCE AND TECHNICAL SERVICES (DFSC-Q)	47514
Product Quality Division (DFSC-QE)	47441
Technical Services Division (DFSC-QS)	47500
Customer/Depot Complaint Focal Point (DFSC-QP)	47441

*Each year DFSC-Q publishes the *Petroleum Quality Assurance/Quality Surveillance Roster*. Activities which do not routinely receive a copy and need to obtain one may contact DFSC-Q.

PERSONNEL LOCATER	47420
DUTY OFFICER (1630-0800 workdays, 24 hours otherwise)	46696
FACSIMILE TRANSCEIVER	46540
TWX MACHINE	710-832-0600

MAILING ADDRESS: OFFICE CODE (LISTED IN PARENTHESES ABOVE), Cameron Station, Alexandria, Va. 22304-6160

MESSAGE ADDRESS: DFSC CAMERON STA VA

DEFENSE LOGISTICS AGENCY DUTY OFFICE	46000

Defense Fuel Region West
3171 North Gaffey St.
San Pedro, Calif. 90731-1099
Telephone: (213) 548-2731/2/3/4/5
Autovon: 833-2876/7/8
Duty Hours: 0800-1630, Pacific Standard Time
Facsimile Number: (213) 548-2736
TWX Number: 910-345-6381

Defense Fuel Region Middle East
Bahrain
FPO, N.Y. 09526-5000
Telephone: 973-7543861/754667
Autovon: 237-1110, extension 754386/754667
Telex Number: 0490 8892

Defense Fuel Region Southeast
P.O. Box TT
Tyndall Air Force Base, Fla. 32403-6001
Telephone: (904) 283-2065 (2871)
Autovon: 970-2065/2917
Duty Hours: 0715-1615, Central Standard Time
Facsimile Number: Autovon 697-6549
EXTEL COM MASTER: 286-824

Defense Fuel Region Southwest
Federal Office Building
2320 LaBranch, Room 1213
Houston, Texas 77004-1091
Telephone: (713) 750-1895
Autovon: 940-1371
Duty Hours: 0730-1600, Central Standard Time
Facsimile Number: (213) 548-2736
TWX Number: 910-345-6381

Defense Fuel Region Central
8900 South Broadway, Building 2
St. Louis, Mo. 63125-1513
Telephone: (314) 263-8346/8205
Autovon: 693-8346
Duty Hours: 0630-1700, Central Standard Time
Facsimile Number: Autovon 693-8429
TWX Number: 910-761-2131

Defense Fuel Region Europe
Building 2304
APO N.Y. 09128-4105
Telephone: Stuttgart, Germany, 49711-6877763
Autovon: 314-430-8364/5/6/7
Duty Hours: 0800-1630
Telex Number: 8417255866†

Defense Fuel Region Pacific
Camp H.M. Smith, Hawaii 96861-5025
Telephone: (804) 477-6692/6792
Autovon: 315-477-6692/6792
Duty Hours: 0700-1530
Telex Number: ITT 7431813†

Defense Fuel Region Northeast
Building 19-01
McGuire Air Force Base, N.J. 08641-9998
Telephone: (609) 724-3766/67
Autovon: 440-3766/67
Duty Hours: 0800-1630, Eastern Standard Time
Facsimile Number: Autovon 440-2244
TWX Number: 510-683-2941

Defense Fuel Region Caribbean
Homestead Air Force Base, Fla. 33039-5146
Telephone: (305) 257-7085/6
Autovon: 791-7085/6
Duty Hours: 0800-1630
Telex Number: WU286565
Facsimile Number: (305) 257-5674

Defense Fuel Region Alaska
Elmendorf Air Force Base, Alaska 99506-5000
Telephone: (907) 552-3760/2857/4650
Autovon: 317-552-3760
Facsimile Number: (907) 753-0517
Duty Hours: 0730-1630

LOOKING BACK

Underway on Fossil Power

When the Navy's newest aircraft carrier put to sea for the first time, its skipper, Captain Lawrence Heywroth Jr., radioed: "Underway on fossil power." This was a reference to the ship's fuel—oil rather than nuclear. (August 1965)

About War—and Wet Petroleum

We have recently been told rather emphatically that much of our packaged petroleum on location in Vietnam is not withstanding the prevailing weather conditions over there. Evidently it rains and the frailties of fiberboard cartons are such that they disintegrate. If 5-gallon or 35-pound pails are involved, they rust rather promptly and lose identification markings. Of course this situation wouldn't exist if covered storage were available but you can't always have such niceties in a combat area.

In recognition of this problem, we have directed that shipments of all materials to Southeast Asia be packed in weatherproofed plywood exterior containers. (September 1966)

Computers to the Rescue

Have you ever tried to stuff 10 pounds of potatoes into a pound bag? That's the dilemma we faced before we brought computers to the rescue in evaluating the growing procurement for jet and reciprocating fuels. Before computers, some buyers had to work as many as 72 hours a week for 4 to 5 weeks to arrive at the award-making point. And we had to do this four times a year.

Today the computer is our buddy. During the past 3 years, more than $2 billion worth of petroleum contracts have been awarded on assist from a computer program. It has reduced bid evaluation time, manhours, and human error. (November 1965)

Petroleum in Vietnam

In the process of moving vast amounts of war supplies and equipment by land, water, and air, 60 million gallons of POL [petroleum, oils, and lubricants] products are consumed every 30 days in Vietnam.

It would take the average family car owner in the U.S. 4,000 years, driving 10,000 miles a year, to equal the amount of POL products consumed in only a day's operation in this combat theater.

POL products, most of which come in ocean-going tankers directly from suppliers, are delivered to Vietnam by military and commercial ships and are unloaded in two ways: ship-to-shore and ship-to-ship. (September 1967)

Navy to Switch to All-Distillate Fuel For Ship Propulsion

The Department of Defense has authorized the Navy to shift to a new fuel for ship propulsion.

An all-distillate marine diesel type of fuel will replace, on a gradual time-phased basis, the Navy special fuel oil now in use. The shift was approved on the condition that the new fuel be introduced in such a manner as to allow industry to adjust to the new requirement. Three years is considered the minimum time for the phase-in, with no large procurements scheduled for the first year.

The shift was based on extensive research by the Navy. The present Navy special fuel oil is high in sulphur and metallic mineral ash-forming compounds which create excessive deposits of soot and slag requiring frequent boiler cleaning and other shipboard maintenance. (April 1969)

COAL EMERGENCY

There is a national shortage of coal. DFSC has not been successful in covering fiscal year 1971 requirements for some activities. Inventory control points have been notified. An interservice coal allocation committee has been formed in order to facilitate distribution of available coals and offers. This center is making every effort to obtain the required coal to prevent any disruption of operations.

Activities are urged to use alternate fuels wherever possible and report any excess coal stock through channels. At the same time, plans for fuel conversions should be accelerated because it is not anticipated that the coal shortage will decrease within the next fiscal year.

You are also encouraged to stockpile coal to the maximum extent feasible under prevailing local conditions. (May 1970)

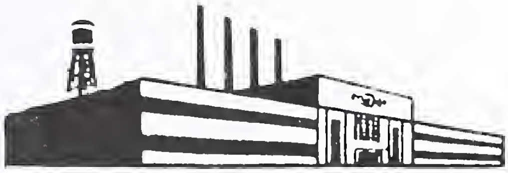
Procurement of Fuel

The prevailing general shortage of petroleum supplies throughout the world and the oil embargoes have made it impossible to obtain Defense Department minimum essential shortfalls without the use of the Defense Production Act. Therefore, letters were forwarded by the Department of the Interior to 22 major oil companies having access to coastal terminals requiring that they provide some 19 million barrels of jet fuels and other bulk products under the Defense Production Act. Problems to be resolved with suppliers included their obtaining necessary storage facilities for products not ordinarily refined by them, obtaining the necessary component materials, developing refining schedules to conform to established tanker schedules, and minimizing the impact of supply of these quantities on the supplier's commercial business. By 6 December 1973, 31 cargoes had been scheduled with vessels assigned to 26 of them. Industry did a commendable job in overcoming many obstacles to supply critical products within a limited time. (April 1974)

DFSC Joins Strategic Petroleum Reserve Program

On 11 April 1977, DFSC became a vital part of the Strategic Petroleum Reserve program. Through a Federal Energy Administration/Department of Defense interagency agreement, DFSC was assigned to procure crude oil for the reserve. In addition, DFSC is responsible for all phases of contract administration, including scheduling and ordering, inspection and quality assurance, and paying contract obligations. (July 1977)

*U.S. GOVERNMENT PRINTING OFFICE: 1986-181-135:40855



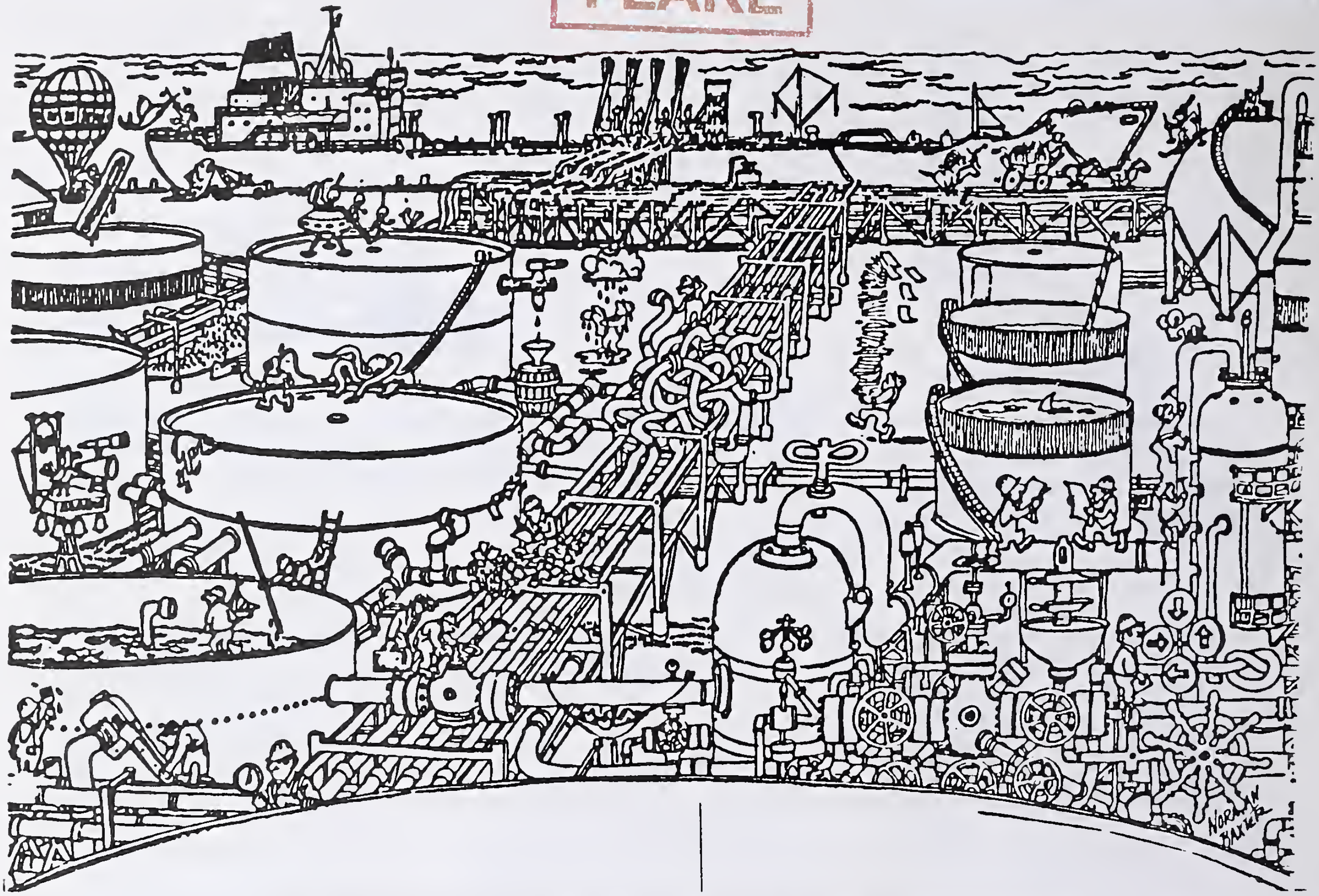
WRITE TO US!

We want to hear your opinions on this special edition of the *FUEL LINE*. Were the articles beneficial? What did we leave out? What needs to be expanded? Who haven't we reached? We will be glad to print your comments and follow up on your article suggestions in future editions of the *FUEL LINE*. Our address is DFSC-DB (*FUEL LINE* Editor), Cameron Station, Alexandria, Va. 22304-6160.

UNIVERSITY OF FLORIDA
3 1262 09683 6605

IN SUMMARY . . .

FLARE



What you can expect from us is support as that is the sole reason for our existence.

DFSC-DB
Defense Logistics Agency
Defense Fuel Supply Center
Cameron Station
Alexandria, Va. 22304-6160

Official Business
Penalty for Private Use, $300

THIRD CLASS MAIL
POSTAGE AND FEES PAID
DEFENSE LOGISTICS AGENCY
PERMIT NO. G-53